show files;t 5/3,k/all
File 344:Chinese Patents ABS Apr 1985-1999/Dec
        (c) 1999 European Patent Office
File 347:JAPIO OCT 1976-1999/SEP(UPDATED 991229)
        (c) 1999 JPO & JAPIO
File 351:DERWENT WPI 1963-1999/UD=, UM=, & UP=199954
        (c) 1999 DERWENT INFO LTD
File 371:FRENCH PATENTS 1961-1999/BOPI 9952
        (c) 2000 INPI. ALL RTS. RESERV.

 5/3,K/1   (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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06296388   **Image available**
DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED **CODE**

PUB. NO.:   11-237980 [JP 11237980 A]
PUBLISHED: August 31, 1999 (19990831)
INVENTOR(s): NARISAWA FUMIO
              NAYA EIKO
              YOKOYAMA TAKANORI
              OOKAWA KEIICHIROU
APPLICANT(s): **HITACHI** LTD
APPL. NO.:   10-038329 [JP 9838329]
FILED: February 20, 1998 (19980220)

DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED **CODE**

APPLICANT(s): **HITACHI** LTD

promising

                        ABSTRACT
PROBLEM TO BE SOLVED: To provide a **code** generator for optimizing a
code which can be applied to an integrated control system without
increasing a required memory capacity...
...activates a specification analysis part 106 and performs phrase analysis
or grammar analysis. Next, an **object**-**oriented** function excluding
part 107 is activated and based on function selection items, stored in the
storage device 104, a non-specified function is determined. Then, a
code generating part 108 is activated, and based on the software
specification for which the phrase...

... or grammar analysis is performed by the specification analytic part 106
and on the output **code** pattern determined by the **object**-
oriented function excluding part 107, **code** generation is performed.

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 5/3,K/2   (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

06097629   **Image available**
AUTOMATIC SOURCE **CODE** GENERATION SYSTEM

PUB. NO.:   11-039148 [JP 11039148 A]
PUBLISHED: February 12, 1999 (19990212)
INVENTOR(s): UCHIDA MASAKO
              YOSHINO SADAO
APPLICANT(s): **HITACHI** INF SYST LTD
APPL. NO.:   09-198485 [JP 97198485]
FILED: July 24, 1997 (19970724)

promising

AUTOMATIC SOURCE **CODE** GENERATION SYSTEM

APPLICANT(s): **HITACHI** INF SYST LTD

ABSTRACT
... an existing program resource obtained by program development using a
structured programming method and an **object** **oriented** programming
relating to an automatic generator system of a source **code** effectively
reusable as the existing program asset.
SOLUTION: Specification relating information for a new application...

... on the specification relating information, a file/DB information
processing part 2A generates a source **code** provided with an 'object'
for realizing input/output processings, a pattern information processing
part 2B generates a source **code** provided with the 'object'
corresponding to a determined processing pattern and a customization
information processing part 2C generates a source **code** provided with
the 'object' for realizing an intrinsic processing respectively. A source
file output processing part 2D outputs the generated source **codes**
respectively to prescribed source files based on the specification relative
information.

5/3,K/3   (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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06065888   **Image available**
DATA DISPLAY SYSTEM IN **OBJECT**-**ORIENTED** PROGRAM

PUB. NO.:   11-007399 [JP 11007399 A]
PUBLISHED: January 12, 1999 (19990112)
INVENTOR(s): YOKOYAMA NAOYUKI
              KAMEDA TATSUYA
              INO KOICHIRO
APPLICANT(s): **HITACHI** LTD
APPL. NO.:   09-159501 [JP 97159501]
FILED: June 17, 1997 (19970617)

DATA DISPLAY SYSTEM IN **OBJECT**-**ORIENTED** PROGRAM

APPLICANT(s): **HITACHI** LTD

ABSTRACT
...attributes of plural other instances related by an instance generated in
a list in an **object**-**oriented** program and to simultaneously update a
database by changing a value of the list of the outputted attributes in an
object-**oriented** database.
SOLUTION: A source **code** is read, classes existing in the read source
code are displayed in the list, the class and the attributes to be
displayed are selected...

5/3,K/4   (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05650590   **Image available**
PROGRAM AND SPECIFICATION GENERATION METHOD

PUB. NO.:   09-265390   [JP 9265390 A]
PUBLISHED: October 07, 1997 (19971007)
INVENTOR(s):   TSUKUDA GUNJI
                DANNO HIROBUMI
APPLICANT(s):   **HITACHI** LTD [000510] (A Japanese Company or Corporation),
                JP (Japan
APPL. NO.:   08-074551   [JP 9674551]
FILED: March 28, 1996 (19960328)

APPLICANT(s):   **HITACHI** LTD [000510] (A Japanese Company or Corporation
                ...

ABSTRACT

PROBLEM TO BE SOLVED: To provide a technique capable of improving software
productivity by an **object**-**oriented** language...

... classes are related by the key data item and the class kind (102) and
the **code** of the class is generated corresponding to relation among the
classes (106 and 107). Then...

 5/3,K/5   (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05564938   **Image available**
OBJECT-**ORIENTED** LANGUAGE PROCESSING METHOD AND PROCESSOR

PUB. NO.:   09-179738   [JP 9179738 A]
PUBLISHED: July 11, 1997 (19970711)
INVENTOR(s):   NAYA EIKO
                FUKUNAGA YASUSHI
APPLICANT(s):   **HITACHI** LTD [000510] (A Japanese Company or Corporation),
                JP (Japan
APPL. NO.:   07-338572   [JP 95338572]
FILED: December 26, 1995 (19951226)

OBJECT-**ORIENTED** LANGUAGE PROCESSING METHOD AND PROCESSOR

APPLICANT(s):   **HITACHI** LTD [000510] (A Japanese Company or Corporation
                ...

ABSTRACT

PROBLEM TO BE SOLVED: To make an execution **code** size small by
converting dynamic object generation to static object generation and
executing object generation...

...SOLUTION: An application source **code** read part 21 reads a dynamic
application source **code** . When analysis is ended and the application
source **code** reaches a terminal, a class generation part 200 newly
generates class definition based on the...

... table 31, a data table 32 and a method table 33. Then, an application
source **code** conversion part 201 converts the dynamic application source
code to a static application source **code** based on the information
of the class table 31, the data table 32 and the...

 5/3,K/6   (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
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05531966   **Image available**

METHOD FOR CHANGING CLASS STRUCTURE

ABSTRACT

... work for moving a method of using only common attribute by the use of
class **code** analytical information to an upper class at the time of
changing the structure of an...

...SOLUTION: Class specification analytical information (C) is prepared
(201) from a source **code** of **object**-**oriented** language, common
attribute information inputted by a user is acquired (202) and a new upper
...

... The common attributes of a lower class (E) to be changed are integrated
(204), method **code** analytical information is prepared (205) from the
method **code** included in the information C and a method in which a set
of use attributes...

... set of used attributes is equal to a set of used methods is detected
(207), **codes** relating to the method concerned are deleted, a main
method name is substituted for the...

...208) the information C, and then the information C is outputted (209) by
a source **code**.

 5/3,K/7   (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05499853   **Image available**
DEVICE FOR AUTOMATICALLY GENERATING SOURCE **CODE** RELATED TO RECORD
DEFINITION

DEVICE FOR AUTOMATICALLY GENERATING SOURCE **CODE** RELATED TO RECORD
DEFINITION

ABSTRACT

PROBLEM TO BE SOLVED: To remove restrictions on source **code** reuse to
realize capsuling in an **object** **oriented** program by specifying an

algorithm in a record definition related source **code** automatic generator...

... operation redefinition file is set to generate a file operation redefinition method. The generated source **code** is expanded in a generation position 016 (a class object definition part or an object...

5/3,K/8   (Item 8 from file: 347)
DIALOG(R)File 347:JAPIO
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05466575   **Image available**
C++ PROGRAMMING SUPPORT DEVICE

PUB. NO.:   09-081375 [JP 9081375 A]
PUBLISHED: March 28, 1997 (19970328)
INVENTOR(s):   JINBO ATSUSHI
               SUEYASU SHIGEMITSU
APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
               JP (Japan
APPL. NO.:   07-241319 [JP 95241319]
FILED: September 20, 1995 (19950920)

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
               ...

ABSTRACT
... To ensure the satisfactory utilization of features of a C++ language access   designator   in   an   **object**-**oriented**   downstream designing-mounting state and to automate the declaration of a friend function...

... functions corresponding to an event to the class declaration part of a C++ language source **code**, and a class declaration part correction means 4 which merges the source **code** information received from the means 3 with the source file that is selected out of a C++ source **code** file 6 via the operation of the operator.

5/3,K/9   (Item 9 from file: 347)
DIALOG(R)File 347:JAPIO
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05359223   **Image available**
OBJECT RELATIVE INFORMATION MANAGEMENT SYSTEM

PUB. NO.:   08-314723 [JP 8314723 A]
PUBLISHED: November 29, 1996 (19961129)
INVENTOR(s):   MATSUSHITA YUKITSUGU
APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
               JP (Japan
APPL. NO.:   07-119537 [JP 95119537]
FILED: May 18, 1995 (19950518)

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
               ...

ABSTRACT
... by adding a function to analyze the inter-object relation based on the application source **code** developed in an **object**- **oriented** programming language and to manage the inter-instance relative information ...

...CONSTITUTION: An inter-object relative information management system of an **object**-**oriented** program comprises a program execution controller 101, an execution state storage 102, an input/output...

 5/3,K/10   (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05359211   **Image available**
CLASS LIBRARY PREPARATION METHOD IN **OBJECT**-**ORIENTED** COBOL LANGUAGE

PUB. NO.:   08-314711 [JP 8314711 A]
PUBLISHED: November 29, 1996 (19961129)
INVENTOR(s): KOBAYASHI MASAKI
              SAKURAZAWA ASAMI   .
              NAMIKI KANENOSUKE
APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
              JP (Japan
APPL. NO.:   07-122158 [JP 95122158]
FILED: May 22, 1995 (19950522)

CLASS LIBRARY PREPARATION METHOD IN **OBJECT**-**ORIENTED** COBOL LANGUAGE

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
              ...

                              ABSTRACT
PURPOSE: To reduce the preparation manhour of a class library by adding a
source **code** analysis function and a class library preparing function to
a class library extraction means...

... every data item and an extraction information file 104. The means 105
includes a source **code** analysis function 106, an editing retrieval
function 107 and a class library preparing function 108...

... program written in a COBOL language and can prepare a class library 109
of an **object**-**oriented** COBOL language. Thus, the library 109 can be
prepared from the source program of the...

 5/3,K/11   (Item 11 from file: 347)
DIALOG(R)File 347:JAPIO
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04594661   **Image available**
METHOD AND SYSTEM FOR INSPECTING TYPE OF PROGRAM

PUB. NO.:   06-266561 [JP 6266561 A]
PUBLISHED: September 22, 1994 (19940922)
INVENTOR(s): ASAMI MASATO
              YAMAMOTO YOICHI
              NAMIOKA MIYOKO
APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation),
              JP (Japan
APPL. NO.:   05-051045 [JP 9351045]
FILED: March 11, 1993 (19930311)
JOURNAL: Section: P, Section No. 1847, Vol. 18, No. 676, Pg. 43,
              December 20, 1994 (19941220)

APPLICANT(s): **HITACHI** LTD [000510] (A Japanese Company or Corporation
              ...

ABSTRACT
PURPOSE: To provide a method for efficiently inspecting a type in a
strongly- typed **object**-**oriented** programming language...

... compiled by a compiler 100 inside a computer system 10, an object 131,
an execution **code** 133 and a type inspection program 135 are generated
and the object 131, on program...

5/3,K/12   (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

012740197   **Image available**
WPI Acc No: 99-546314/199946
XRPX Acc No: N99-405476
 Code generating apparatus - has **code** generator which produces
 code based on program information generated by **object**-
 oriented function exclusion unit which eliminates unnecessary
 function among **object**-**oriented** functions
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 11237980 A   19990831 JP 9838329   A   19980220 G06F-009/06   199946 B

Priority Applications (No Type Date): JP 9838329 A 19980220
Language, Pages: JP 11237980 (11)

 Code generating apparatus...

 ...has **code** generator which produces **code** based on program
 information generated by **object**-**oriented** function exclusion unit
 which eliminates unnecessary function among **object**-**oriented**
 functions
Patent Assignee: **HITACHI** LTD...

 ...Abstract (Basic): NOVELTY - A **code** generator (108) produces a
    code based on program information generated by an **object**-
    oriented function exclusion unit (107). The **object**-**oriented**
    function exclusion unit eliminates unnecessary function among
    object-**oriented** functions according to a function exclusion
    rule. DETAILED DESCRIPTION - The **code** generating apparatus, which
    generates **code** from **object**-**oriented** specifications, has a
    specification analyzer (106) that analyzes the specifications based on
    the **object**-**oriented** input and extracts the specification
    information. An INDEPENDENT CLAIM is included for an **object**-
    oriented optimization **code** generation method...

 ...ADVANTAGE - Reduces required memory capacity since unnecessary function
    of **object**-**oriented** programming language is eliminated when
    generating **code** from **object**-**oriented** document. DESCRIPTION
    OF DRAWING(S) - The figure is a diagram showing the entire components
    of the **code** generating apparatus. (106) Specification analyzer;
    (107) **Object**-**oriented** function exclusion unit; (108) **Code**
    generator...
Title Terms: **CODE**;

5/3,K/13   (Item 2 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

                  Karen Lehman EIC 3600 306-5783 13:13 January 3, 2000

012389050   **Image available**
WPI Acc No: 99-195157/199917
XRPX Acc No: N99-143427
 Automatic source **code generation for batch processing type busin ss
 us application - involves setting type definition corresponding to input
 specification and using object definition to generate source **code** for
 customized application**
Patent Assignee: **HITACHI** JOHO SYSTEMS KK (**HITA-N)**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 11039148	A	19990212	JP 97198485	A	19970724	G06F-009/06	199917 B

Priority Applications (No Type Date): JP 97198485 A 19970724
Language, Pages: JP 11039148 (13)

 Automatic source **code generation for batch processing type business
 use application...**

 **...involves setting type definition corresponding to input specification
 and using object definition to generate source **code** for customized
 application**
Patent Assignee: **HITACHI** JOHO SYSTEMS KK...

...**HITA-N)**

...Abstract (Basic): to input specification are set and using a database
     containing various object definition, a source **code** is generated
     implementing **object** **oriented** and structured programming
     techniques. The source **code** thus generated supports customization
     of information processing...

...ADVANTAGE - Supports both **object** **oriented** and structured
     programming techniques...
...Title Terms: **CODE**;

5/3,K/14   (Item 3 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

012109819   **Image available**
WPI Acc No: 98-526731/199845
XRPX Acc No: N98-411765
 Class modification support method for **object **oriented** software
 development - involves adding section coding information which shows name
 of section **code**, value and meaning of higher order class name and
 lower order class name to section coding table**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 10232769	A	19980902	JP 9734628	A	19970219	G06F-009/06	199845 B

Priority Applications (No Type Date): JP 9734628 A 19970219
Language, Pages: JP 10232769 (9)

 Class modification support method for **object **orient d** software
 development...**

 **...involves adding section coding information which shows name of section
 code, value and meaning of higher order class name and lower order**

class name to section...
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): Attributes such as section **code** and description,
which shows role of lower order class, in the higher order class, is
defined. Then, the section coding information which shows the name of a
section **code** value and meaning of higher order class name and new
lower order class name is...
...Title Terms: **CODE**;

5/3,K/15   (Item 4 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011819169   **Image available**
WPI Acc No: 98-236079/199821
XRPX Acc No: N98-187192
Object **oriented** distributed system with network independence -
selects object corresponding to requested message from computer, based on
which procedure of selected object is utilized by requesting computer
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 10074146	A	19980317	JP 96229705	A	19960830	G06F-009/44	199821 B

Priority Applications (No Type Date): JP 96229705 A 19960830
Language, Pages: JP 10074146 (12)

Object **oriented** distributed system with network independence...
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): computers, by an autonomous dispersion communication
processor (1ad,2ad). The relationship between the message
identification **code** and the procedure of the object is stored in a
memory...

5/3,K/16   (Item 5 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011570661   **Image available**
WPI Acc No: 97-547142/199750
XRPX Acc No: N97-456026
Program **code** generation method - involves generating program **code**
by analysing data item name and service management class
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9265390	A	19971007	JP 9674551	A	19960328	G06F-009/06	199750 B

Priority Applications (No Type Date): JP 9674551 A 19960328
Language, Pages: JP 9265390 (10)

Program **code** generation method...

...involves generating program **code** by analysing data item name and
service management class
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): class type and the data item, the object assembly is
controlled by forming the program **code** for the service object class
...

...ADVANTAGE - Improves **code** generation efficiency. Improves program
development by **object** **oriented** analysis...
...Title Terms: **CODE**;

5/3,K/17   (Item 6 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011467565   **Image available**
WPI Acc No: 97-445472/199741
XRPX Acc No: N97-371093
 Renewal method of **object **oriented** database management system -
 involves establishing by-pass link information in slot of one or more
 intermediate objects which are inserted between attribute value storing
 object and determined nearest object**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 9204334 A   19970805 JP 9634363   A   19960129 G06F-012/00   199741 B

Priority Applications (No Type Date): JP 9634363 A 19960129
Language, Pages: JP 9204334 (11)

 Renewal method of **object **oriented** database management system...**
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): an object having a number of slots with name. A
   preknown value or an identification **code** is stored in the slot
   name. A link information of self object with other objects...

5/3,K/18   (Item 7 from file: 351)
DIALOG(R)File 351:DERWENT WPI
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011462194   **Image available**
WPI Acc No: 97-440101/199741
XRPX Acc No: N97-366008
 Source **code formation method with eliminated **code** segment
 restoration facility for **object** **oriented** analysis and design
 support system - involves removing comment symbols demarcating specific
 code segment, initially ordained to be ignored, when its execution is
 required**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 9198241 A   19970731 JP 967138   A   19960119 G06F-009/06   199741 B

Priority Applications (No Type Date): JP 967138 A 19960119
Language, Pages: JP 9198241 (7)

 Source **code formation method with eliminated **code** s gment
 restoration facility for **object** **oriented** analysis and d sign
 support system...**
 ...involves removing comment symbols demarcating specific **code** segm nt,
 initially ordained to be ignored, when its execution is required

Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The method involves storing the **code** segment that
    is marked as a comment entry, so as to be ignored during program...

...When this **code** segment is required to be executed, the comment
    symbols are removed and the **code** segment is restored for execution
    ...
...Title Terms: **CODE**;

5/3,K/19   (Item 8 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011429531   **Image available**
WPI Acc No: 97-407438/199738
XRPX Acc No: N97-338860
 Translator for **object **oriented** language processor for engine
 control system of motor vehicle - in which processing of solid state
 memory is carried out based on static object formation**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 9179738 A   19970711 JP 95338572 A   19951226   199738 B

Priority Applications (No Type Date): JP 95338572 A 19951226
Language, Pages: JP 9179738 (17)

 Translator for **object **oriented** language processor for engine
 control system of motor vehicle...**
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The translator (20) has a reader (21) which reads the
    application source **code** related to dynamic object formation. An
    analyzer (22) analyzes the read application source **code** and
    extracts the instance contained in the application source **codes**. A
    set of registration units (23-25) carries out registration
    administration of the extracted instance...

...A pair of **code** converters (200,201) convert the dynamic applications
    of **code** to a static application source **code** based on the
    instance information. Then, dynamic object formation of the object is
    transformed to a static object formation based on static application
    source **code**. A solid state memory is processed based on static
    object formation...

...ADVANTAGE - Enables optimization of execution **code** size...

5/3,K/20   (Item 9 from file: 351)
DIALOG(R)File 351:DERWENT WPI
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011377259   **Image available**
WPI Acc No: 97-355166/199733
XRPX Acc No: N97-294501
 **Class configuration alteration method for software development supporting
 system - involves outputting altered analysis information as source
 code by correcting class specification analysis information**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001

Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 9146766 A   19970606 JP 95323911 A   19951117   199733 B

Priority Applications (No Type Date): JP 95323911 A 19951117
Language, Pages: JP 9146766 (22)

... involves outputting altered analysis information as source **code by
correcting class specification analysis information**
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): a higher order class name, attribute name, die of an
    attribute, method name and method **code** from the source **code**
    described in an **object** **oriented** language and producing a class
    specification analysis information. A new higher-order class consisting
    of...

...referring to each operation procedure and a set of methods are
    extracted, and a method **code** analysis information is formed based
    on the method **code**.
        ...

...processing co- ordinates is detected using the use attribute ensemble
    and use method ensemble. The **code** relating to the detected method
    is deleted. The class specification analysis information is also
    corrected...

...method term of main method. The altered class specification analysis
    information is output as source **code**.

...Title Terms: **CODE**;

5/3,K/21   (Item 10 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011325250   **Image available**
WPI Acc No: 97-303154/199728
XRPX Acc No: N97-250735
Automatic recording format related source **code generation appts for
object **oriented** software development system - processes source
code of every class obtained from input class definition file, which
is expanded to form new class definition file**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
JP 9114653 A   19970502 JP 95266794 A   19951016 G06F-009/06   199728 B

Priority Applications (No Type Date): JP 95266794 A 19951016
Language, Pages: JP 9114653 (11)

Automatic recording format related source **code generation appts for
object **oriented** software development system...**

...processes source **code of every class obtained from input class
definition file, which is expanded to form n w...**
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): 17) are obtained. The input information is decoded for
    every class and accordingly the source **code** for record definition
    in each class is produced...

...The developed source **code** is processed for every class definition
    file and a new class definition file (OB) is...

...ADVANTAGE - Realizes object orientation and redefinition of record
    format. Enables reusing of source **code** of file record definition...
    .Title Terms: **CODE**;

5/3,K/22   (Item 11 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011260920   **Image available**
WPI Acc No: 97-238823/199722
XRPX Acc No: N97-197296
 New computer program preparation by combining program modules - by
 automatically extracting dependence relation of component with another
 component by computer from interface definition within class definition
Patent Assignee: **HITACHI** LTD (HITA
Inventor: KOZUKA K; OKODA T; SAKAMOTO K; SEKI T; YAMADA E; OHKODA T
Number of Countries: 003   Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week	
GB 2307070	A	19970514	GB 9623171	A	19961106	G06F-009/44	199722	B
JP 9134282	A	19970520	JP 95289761	A	19951108	G06F-009/06	199730	
US 5845119	A	19981201	US 96744457	A	19961107	G06F-009/45	199904	

Priority Applications (No Type Date): JP 95289761 A 19951108
Language, Pages: GB 2307070 (43); JP 9134282 (12)

Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The method involves automatically extracting by a
    computer a class definition expressing a component in **object**
    oriented language, from a source **code** of an already existing
    program from source **code** file (11). A dependence relation of the
    component with another component is automatically extracted by...

5/3,K/23   (Item 12 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011145546   **Image available**
WPI Acc No: 97-123470/199712
XRPX Acc No: N97-101759
 Program formation method for **object **oriented** language system -**
 involves forming inspection **code which examines value of each**
 attribute data item that corresponds to reference class outside data item
 name
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001   Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week	
JP 9006601	A	19970110	JP 95157943	A	19950623	G06F-009/06	199712	B

Priority Applications (No Type Date): JP 95157943 A 19950623
Language, Pages: JP 9006601 (30)

 Program formation method for **object **oriented** language system...**

 ...involves forming inspection **code which examines value of each**

attribute data item that corresponds to reference class outside data...
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): The program formation method involves forming a
program of an **object** **oriented** language based on class
specification. A class name type and an attribute data item are...

...A class definition **code** which indicates the type of the class name
and the attribute data item is formed...

...based on the attribute data item name and the reference data item name.
An inspection **code** which examines the value of each attribute data
item, is formed...
...Title Terms: **CODE**;

5/3,K/24   (Item 13 from file: 351)
DIALOG(R)File 351:DERWENT WPI

011091573   **Image available**
WPI Acc No: 97-069498/199707
XRPX Acc No: N97-057300
 Class library prodn. method of **object-**oriented** common business
 oriented language - by respectively producing class which control data
 item class produced per data item**
Patent Assignee: **HITACHI** LTD (HITA
Number of Countries: 001   Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 8314711	A	19961129	JP 95122158	A	19950522	G06F-009/06	199707 B

Priority Applications (No Type Date): JP 95122158 A 19950522
Language, Pages: JP 8314711 (10)

 Class library prodn. method of **object-**oriented** common business
 oriented language...**
Patent Assignee: **HITACHI** LTD...

...Abstract (Basic): analysing an existing program counter of a common
business oriented language and analysing a source **code** for
processing...

...ADVANTAGE - Reduces manhour in reconstruction of **object**-**oriented**
system design and structural design. Increases efficiency of class
library prodn. process that employs software...

5/3,K/25   (Item 14 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009879578   **Image available**
WPI Acc No: 94-159492/199419
XRPX Acc No: N94-125395
 Class hierarchical relationship determination method for **object
 oriented language - affixing **codes** each having predetermined
 relation to each class in hierarchy and deciding relationship of
 inheritance in hierarchy of two optional class s with series of **codes**
 affixed to two optional classes having hierarchical r lationship**
Patent Assignee: **HITACHI** LTD (HITA   ); **HITACHI** SEIBU SOFTWARE CO
   LTD (**HITA-N)**
Inventor: TOMITA H; YOSHIMURA K

Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week
US 5313633 A   19940517 US 90529955 A   19900529 G06F-009/40   199419 B

Priority Applications (No Type Date): JP 89135862 A 19890531
Language, Pages: US 5313633 (36)

Class hierarchical relationship determination method for **object**
oriented language...
...affixing **codes** each having predetermined relation to each class in
hierarchy and deciding relationship of inheritance in hierarchy of two
optional classes with series of **codes** affixed to two optional classes
having hierarchical relationship
Patent Assignee: **HITACHI** LTD...

...**HITACHI** SEIBU SOFTWARE CO LTD...

...**HITA-N)**

...Abstract (Basic): The computer implemented process of operating an
    object **oriented** language having a number of classes in a class
    hierarchical relationship in a single inheritance and using a message
    passing to activate a method, involves affixing **codes** to each of
    the number of classes, each having a predetermined relationship to each
    other...

...relationship between the number of classes is decided, by identifying
    the predetermined relationship between the **codes** affixed to the
    classes having the class hierarchical relationship...

...The affixing occurs prior to the deciding and involves using numerical
    characters as the affixed **codes**. The numerical characters, with a
    specific class as a reference and comprising the **codes** of classes
    in a sub hierarchy, are numerical values that increase consecutively
    from a first...

...USE/ADVANTAGE - Deciding class hierarchical relationship of **object**
    oriented language in which high speed execution is aimed at by
    compiling...
...Title Terms: **CODE**;

show files;ds;t 6/3/all;t 7/3/all;t 10/3,k/all
File 344:Chinese Patents ABS Apr 1985-1999/Dec
        (c) 1999 European Patent Office
File 347:JAPIO OCT 1976-1999/SEP(UPDATED 991229)
        (c) 1999 JPO & JAPIO
File 351:DERWENT WPI 1963-1999/UD=, UM=, & UP=199954
        (c) 1999 DERWENT INFO LTD
File 371:FRENCH PATENTS 1961-1999/BOPI 9952
        (c) 2000 INPI. ALL RTS. RESERV.

Set	Items	Description
S1	650125	PA="HITACHI"
S2	17555	PA=HITA-N
S3	92	(S1 OR S2) AND OBJECT()ORIENTED
S4	25	S3 AND CODE?
S5	25	S4 NOT AD>990222
S6	13	AU="NARISAWA F":AU="NARISAWA FUMIO"
S7	2	AU="NAYA H"
S8	415	AU="YOKOYAMA T" OR AU="YOKOYAMA TAKANORI"
S9	58	AU="OHKAWA K"
S10	5	(S8 OR S9) AND OBJECT(2N)ORIENT?

 6/3/1   (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

06296388   **Image available**
DEVICE AND METHOD FOR GENERATING OBJECT-ORIENTATED OPTIMIZED CODE

PUB. NO.:   11-237980 [JP 11237980 A]
PUBLISHED: August 31, 1999 (19990831)
INVENTOR(s): **NARISAWA FUMIO**
              NAYA EIKO
              YOKOYAMA TAKANORI
              OOKAWA KEIICHIROU
APPLICANT(s): HITACHI LTD
APPL. NO.:   10-038329 [JP 9838329]
FILED: February 20, 1998 (19980220)

 6/3/2   (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05897880   **Image available**
DEVICE FOR DETECTING OUTER PERIPHERAL SHAPE OF OBJECT

PUB. NO.:   10-180980 [JP 10180980 A]
PUBLISHED: July 07, 1998 (19980707)
INVENTOR(s): **NARISAWA FUMIO**
APPLICANT(s): SODA TEKKO KK [000000] (A Japanese Company or Corporation),
              JP (Japan)
              ASTECS KK [000000] (A Japanese Company or Corporation), JP
              (Japan)
APPL. NO.:   10-025217 [JP 9825217]
FILED: January 23, 1998 (19980123)

6/3/3   (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05357845   **Image available**

SPECTROMETER

```
PUB. NO.:       08-313345  [JP 8313345  A]
PUBLISHED:      November 29, 1996 (19961129)
INVENTOR(s):    SATO ISAO
                MIZUNO ATSUSHI
                **NARISAWA FUMIO**
                HARANO MASAYUKI
APPLICANT(s):   HIOKI EE CORP [399815] (A Japanese Company or Corporation),
                JP (Japan)
APPL. NO.:      07-142704  [JP 95142704]
FILED:          May 17, 1995 (19950517)
```

6/3/4   (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05348676   **Image available**
SPECTROMETER

```
PUB. NO.:       08-304176  [JP 8304176  A]
PUBLISHED:      November 22, 1996 (19961122)
INVENTOR(s):    MIZUNO ATSUSHI
                HARANO MASAYUKI
                **NARISAWA FUMIO**
                SEKI KAZUHIRO
APPLICANT(s):   HIOKI EE CORP [399815] (A Japanese Company or Corporation),
                JP (Japan)
APPL. NO.:      07-129332  [JP 95129332]
FILED:          April 28, 1995 (19950428)
```

6/3/5   (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05292347   **Image available**
SPECTROPHOTOMETER

```
PUB. NO.:       08-247847  [JP 8247847  A]
PUBLISHED:      September 27, 1996 (19960927)
INVENTOR(s):    **NARISAWA FUMIO**
                MIZUNO ATSUSHI
                SEKI KAZUHIRO
APPLICANT(s):   HIOKI EE CORP [399815] (A Japanese Company or Corporation),
                JP (Japan)
APPL. NO.:      07-081865  [JP 9581865]
FILED:          March 14, 1995 (19950314)
```

6/3/6   (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05292345   **Image available**
SPECTROPHOTOMETER

```
PUB. NO.:       08-247845  [JP 8247845  A]
PUBLISHED:      September 27, 1996 (19960927)
INVENTOR(s):    **NARISAWA FUMIO**
                MIZUNO ATSUSHI
                SEKI KAZUHIRO
```

APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
              JP (Japan)
APPL. NO.:   07-081864 [JP 9581864]
FILED: March 14, 1995 (19950314)

6/3/7   (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05227660   **Image available**
DETECTOR FOR MATERIAL TO BE PRINTED FOR SCREEN PRINTING MACHINE

PUB. NO.:   08-183160 [JP 8183160 A]
PUBLISHED: July 16, 1996 (19960716)
INVENTOR(s): **NARISAWA FUMIO**
APPLICANT(s): TOYO CORP KK [000000] (A Japanese Company or Corporation), JP
              (Japan)
APPL. NO.:   06-337669 [JP 94337669]
FILED: December 28, 1994 (19941228)

6/3/8   (Item 8 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

04707010   **Image available**
SPECTROPHOTOMETER

PUB. NO.:   07-027610 [JP 7027610 A]
PUBLISHED: January 31, 1995 (19950131)
INVENTOR(s): TANAKA KOKI
              NARISAWA FUMIO
APPLICANT(s): HIOKI EE CORP [399815] (A Japanese Company or Corporation),
              JP (Japan)
APPL. NO.:   05-195349 [JP 93195349]
FILED: July 13, 1993 (19930713)

6/3/9   (Item 9 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

01134984   **Image available**
SWITCHING DEVICE FOR CURRENT/SPEED CONTROL

PUB. NO.:   58-072384 [JP 58072384 A]
PUBLISHED: April 30, 1983 (19830430)
INVENTOR(s): **NARISAWA FUMIO**
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
              (Japan)
APPL. NO.:   56-171782 [JP 81171782]
FILED: October 27, 1981 (19811027)
JOURNAL: Section: E, Section No. 188, Vol. 07, No. 166, Pg. 46, July
              21, 1983 (19830721)

6/3/10   (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

01115922   **Image available**
SPEED CONTROLLING DEVICE OF MOTOR USED FOR OILER

```
PUB. NO.:        58-053322  [JP 58053322  A]
PUBLISHED:       March 29, 1983 (19830329)
INVENTOR(s):     **NARISAWA FUMIO**
APPLICANT(s):    TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:       56-151377  [JP 81151377]
FILED:           September 26, 1981 (19810926)
JOURNAL:         Section: M, Section No. 222, Vol. 07, No. 137, Pg. 166, June
                 15, 1983 (19830615)
```

6/3/11   (Item 11 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

00813697   **Image available**
CURRENT LIMITING DEVICE FOR MOTOR

```
PUB. NO.:        56-133997  [JP 56133997  A]
PUBLISHED:       October 20, 1981 (19811020)
INVENTOR(s):     **NARISAWA FUMIO**
APPLICANT(s):    TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:       55-036980  [JP 8036980]
FILED:           March 25, 1980 (19800325)
JOURNAL:         Section: E, Section No. 91, Vol. 06, No. 12, Pg. 64, January
                 23, 1982 (19820123)
```

6/3/12   (Item 12 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

00563310   **Image available**
TENSION CONTROLLER FOR ROLLING MILL

```
PUB. NO.:        55-050910  [JP 55050910  A]
PUBLISHED:       April 14, 1980 (19800414)
INVENTOR(s):     MINEURA TOSHIMI
                 **NARISAWA FUMIO**
APPLICANT(s):    TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:       53-124570  [JP 78124570]
FILED:           October 12, 1978 (19781012)
JOURNAL:         Section: M, Section No. 18, Vol. 04, No. 92, Pg. 151, July
                 03, 1980 (19800703)
```

6/3/13   (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

012531405   **Image available**
WPI Acc No: 99-337511/199928
XRPX Acc No: N99-252936
**Vehicle control apparatus for user controllable environment and theft
protection**
Patent Assignee: HITACHI LTD (HITA)
Inventor: **NARISAWA F**; NAYA H; OHKAWA K; YOKOYAMA T
Number of Countries: 021 Number of Patents: 001
Patent Family:
Patent No Kind Date   Applicat No Kind Date   Main IPC   Week

```

WO 9923539  A1 19990514 WO 97JP3988  A  19971031 G05B-019/04   199928 B

Priority Applications (No Type Date): WO 97JP3988 A 19971031
Filing Details:
Patent     Kind Filing Notes      Application  Patent
WO 9923539  A1
    Designated States (National): CN JP KR US
    Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC
    NL PT SE
Language, Pages: WO 9923539 (J, 59)

**7/3/1      (Item 1 from file: 351)**
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

012531405     **Image available**
WPI Acc No: 99-337511/199928
XRPX Acc No: N99-252936
 **Vehicle control apparatus for user controllable environment and theft
 protection**
Patent Assignee: HITACHI LTD (HITA  )
Inventor: NARISAWA F; **NAYA H**; OHKAWA K; YOKOYAMA T
Number of Countries: 021  Number of Patents: 001
Patent Family:
Patent No  Kind  Date    Applicat No Kind  Date    Main IPC      Week
WO 9923539  A1 19990514 WO 97JP3988  A   19971031 G05B-019/04   199928 B

Priority Applications (No Type Date): WO 97JP3988 A 19971031
Filing Details:
Patent     Kind Filing Notes      Application  Patent
WO 9923539  A1
    Designated States (National): CN JP KR US
    Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC
    NL PT SE
Language, Pages: WO 9923539 (J, 59)

**7/3/2      (Item 2 from file: 351)**
DIALOG(R)File 351:DERWENT WPI
(c) 1999 DERWENT INFO LTD. All rts. reserv.

011764515     **Image available**
WPI Acc No: 98-181425/199817
XRPX Acc No: N98-143610
 **Navigation system with information processing unit and mounted display -
 mounted on moving body for displaying traffic information such as map
 information and position information of moving body on display, system
 stores application program for processing traffic information which is
 partially exchanged**
Patent Assignee: HITACHI LTD (HITA  )
Inventor: FUKUNAGA Y; NAKAMURA K; **NAYA H**
Number of Countries: 019  Number of Patents: 002
Patent Family:
Patent No  Kind  Date    Applicat No Kind  Date    Main IPC      Week
EP 833289   A1 19980401 EP 97115932  A   19970912 G08G-001/0968 199817 B
JP 10103970 A  19980424 JP 96254678  A   19960926 G01C-021/00   199827

Priority Applications (No Type Date): JP 96254678 A 19960926
Filing Details:
Patent     Kind Filing Notes      Application  Patent
EP 833289   A1
    Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU
    MC NL PT SE

Language, Pages: EP 833289 (E, 22); JP 10103970 (12)

**10/3,K/1     (Item 1 from fil : 347)**
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

06296388    **Image available**
DEVICE AND METHOD FOR GENERATING **OBJECT**-**ORIENTATED** OPTIMIZED CODE

PUB. NO.:      11-237980  [JP 11237980  A]
PUBLISHED:     August 31, 1999 (19990831)
INVENTOR(s):   NARISAWA FUMIO
               NAYA EIKO
               **YOKOYAMA TAKANORI**
               OOKAWA KEIICHIROU
APPLICANT(s):  HITACHI LTD
APPL. NO.:     10-038329  [JP 9838329]
FILED:         February 20, 1998 (19980220)

DEVICE AND METHOD FOR GENERATING **OBJECT**-**ORIENTATED** OPTIMIZED CODE

INVENTOR(s):   NARISAWA FUMIO
               NAYA EIKO
               **YOKOYAMA TAKANORI**
               OOKAWA KEIICHIROU

ABSTRACT
...activates a specification analysis part 106 and performs phrase analysis
or  grammar  analysis.  Next, an **object**-**oriented** function excluding
part  107 is activated and based on function selection items, stored in the
...

... by  the  specification analytic part 106 and on the output code pattern
determined by the **object**-**oriented** function excluding part 107, code
generation is performed.

**10/3,K/2     (Item 2 from file: 347)**
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05630204    **Image available**
**OBJECT**-**ORIENTED** DISTRIBUTED PROCESSOR

PUB. NO.:      09-245004  [JP 9245004  A]
PUBLISHED:     September 19, 1997 (19970919)
INVENTOR(s):   **YOKOYAMA TAKANORI**
               IKEDA KOJI
               OTSUJI SHINYA
               SUZUKI SHOJI
               KOBAYASHI NOBUHISA
APPLICANT(s):  HITACHI LTD [000510] (A Japanese Company or Corporation), JP
               (Japan)
APPL. NO.:     08-049196  [JP 9649196]
FILED:         March 06, 1996 (19960306)

**OBJECT**-**ORIENTED** DISTRIBUTED PROCESSOR

INVENTOR(s):   **YOKOYAMA TAKANORI**
               IKEDA KOJI
               OTSUJI SHINYA

SUZUKI SHOJI
KOBAYASHI NOBUHISA

**10/3,K/3      (Item 3 from file: 347)**
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05466583    **Image available**
**OBJECT**-**ORIENTED**   COMPUTER   SYSTEM   AND   COMPILER   FOR   **OBJECT**-
**ORIENTED** PROGRAM

PUB. NO.:      09-081383  [JP 9081383  A]
PUBLISHED:     March 28, 1997 (19970328)
INVENTOR(s):   **YOKOYAMA TAKANORI**
               NAYA EIKO
               HIROTA ATSUHIKO
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
               (Japan)
APPL. NO.:     07-235162  [JP 95235162]
FILED:         September 13, 1995 (19950913)

**OBJECT**-**ORIENTED**   COMPUTER   SYSTEM   AND   COMPILER   FOR   **OBJECT**-
**ORIENTED** PROGRAM

INVENTOR(s):   **YOKOYAMA TAKANORI**
               NAYA EIKO
               HIROTA ATSUHIKO
                              ABSTRACT
PROBLEM  TO  BE  SOLVED:  To  provide  the **object**-**oriented** computer
system  and  a development tool which enable processes to efficiently share
objects...

**10/3,K/4      (Item 4 from file: 347)**
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05317315    **Image available**
**OBJECT**-**ORIENTED** DATA BASE SYSTEM AND PROCESSING METHOD THEREFOR

PUB. NO.:      08-272815  [JP 8272815  A]
PUBLISHED:     October 18, 1996 (19961018)
INVENTOR(s):   **YOKOYAMA TAKANORI**
               NAYA EIKO
               SAITO MASAHIKO
               HIROTA ATSUHIKO
               TSUNETOMI KUNIHIKO
               KAMIWAKI TADASHI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
               (Japan)
APPL. NO.:     07-077595  [JP 9577595]
FILED:         April 03, 1995 (19950403)

**OBJECT**-**ORIENTED** DATA BASE SYSTEM AND PROCESSING METHOD THEREFOR

INVENTOR(s):   **YOKOYAMA TAKANORI**
               NAYA EIKO
               SAITO MASAHIKO
               HIROTA ATSUHIKO
               TSUNETOMI KUNIHIKO
               KAMIWAKI TADASHI

**10/3,K/5     (Item 5 from file: 347)**
DIALOG(R)File 347:JAPIO
(c) 1999 JPO & JAPIO. All rts. reserv.

05074955    **Image available**
**OBJECT**-**ORIENTED** INFORMATION PROCESSING SYSTEM

PUB. NO.:       08-030455  [JP 8030455  A]
PUBLISHED:      February 02, 1996 (19960202)
INVENTOR(s):    **YOKOYAMA TAKANORI**
                SHIMADA MASARU
                SAITO MASAHIKO
                TSUNETOMI KUNIHIKO
                NAKAMURA TOMOAKI
APPLICANT(s):   HITACHI LTD [000510] (A Japanese Company or Corporation), JP
                (Japan)
APPL. NO.:      06-164996  [JP 94164996]
FILED:          July 18, 1994 (19940718)

**OBJECT**-**ORIENTED** INFORMATION PROCESSING SYSTEM

INVENTOR(s):    **YOKOYAMA TAKANORI**
                SHIMADA MASARU
                SAITO MASAHIKO
                TSUNETOMI KUNIHIKO
                NAKAMURA TOMOAKI

?

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show files;ds;t 3/,k/all
File 348:EUROPEAN PATENTS 1978-1999/DEC W51
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Set   Items   Description
S1   7324   PA="HITACHI"
S2   21   S1 AND OBJECT(2N)ORIENT?
S3   9   S2 AND CODE?
```

**3/K/1**
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PATENT ASSIGNEE:
  **Hitachi**, Ltd...

...SPECIFICATION is a conceptual view for illustrating storing or packaging
of network setup information in an **object**-**oriented** database in
the network management system according to the invention;
    Fig. 11 is a view...be made of the concept of storing or packaging to
network setup information in the **object**-**oriented** database in the
network management system according to the instant embodiment of the
invention.
    Individual...be made of a registration method which allows the network
setup information packaged in the **object**-**oriented** database shown
in Fig. 10 to be handled on the directory database 241 in a...

...CLAIMS media switching type infrastructure and a media sharing type
        infrastructure are combined coexistently, comprising:
    a **code** section for establishing correspondences among information
        concerning physical connections (1010) of equipment on said computer
        ...

...A storage medium for a network management system according to claim 7,

        further comprising:
    a **code** section (22; 221) for executing identification of equipment
        (25) connected to said computer network (20...

...A storage medium for a network management system according to claim 7,

        further comprising:
    a **code** section (22; 50) for searching physical addresses (53)
        intrinsic to said network ports on the...

...A storage medium for a network management system according to claim 7,

        further comprising:
    a **code** section (36) for displaying said physical interconnection
        information, logical network information or user information in
        different areas (1010, 1020, 1040), respectively, in the form of
        relevant icons,
    a **code** section (1047; 1027) for displaying association of the
        information in said individual areas;
    a **code** section (210; 2103) for displaying the information in said
        individual areas in one frame three-dimensionally; and
    a **code** section for generating displays indicating mutual relations
        among said areas in which said icons are...

**3/K/2**
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Karen Lehman EIC 3600 306-5783 13:20 January 3, 2000

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**Document management systems using \*\*obj ct\*\*- and agent-\*\*oriented\*\* methods**

PATENT ASSIGNEE:
  \*\*HITACHI\*\*, LTD...

...ABSTRACT factors increase. In the system configuration with an object execution environment (1) implemented with an \*\*object\*\*-\*\*oriented\*\* function and an agent execution environment (2) implemented with an agent-oriented function, a unit...

...execution environment. With this configuration, a system developer can use the merits of both the \*\*object\*\*- and agent-\*\*oriented\*\* paradigms by implementing a function necessary for stable operation by an object and a function...

...SPECIFICATION high stability and easy maintenance.
    First conventional techniques for such a system configuration are an \*\*object\*\*-\*\*oriented\*\* approach : "\*\*Object\*\*-\*\*Oriented\*\* Analysis and Design" by Shinich HONIDEN and Akihiro YAMASHIRO, Journal of Information Processing Society of Japan, Vol. 35, No. 5, 1994 (hereinafter called Prior Art 1). According to the \*\*object\*\*-\*\*oriented\*\* approach described in this paper, a subject in real world (called an object) and an...

...and each object requests an another object to execute a particular task. Introduction of this \*\*object\*\*-\*\*oriented\*\* paradigm, simulating approximately to modelling and encapsulating of real subject world, makes the change range...

...of adding a function can be improved.
    Attention has recently been drawn to a distributed \*\*object\*\*-\*\*oriented\*\* approach in which a plurality of hardware components and objects on OSes connected by a network can be cooperated : "Latest \*\*Object\*\*-\*\*Oriented\*\* Practice Guide" by Nikkei BP Ltd., 1995 (hereinafter called Prior Art 2).
    Second conventional techniques...

...communication language. Operation of an agent itself and cooperation with another agent provide system functions.
    \*\*Object\*\*-\*\*oriented\*\* technologies have been recently used for providing particular means for efficiently developing highly sophisticated software. An agent-oriented system using such an \*\*object\*\*-\*\*oriented\*\* architecture as its basic technologies has been developed : "KQML as an Agent Communication Language", by...

...November 1994 (hereinafter called Prior Art 4). An agent-oriented architecture is configured on an \*\*object\*\*-\*\*oriented\*\* architecture. An agent can be considered as an object having functions extended by the agent...is no time required for the message exchange (Prior Art 3).
    As compared to the \*\*object\*\*-\*\*oriented\*\* paradigm of Prior Art 1, the agent-oriented paradigm of Prior Art 2 provides an...agents in the expanded system increases, and capable of maintaining the merits of both the \*\*object\*\*- and agent-\*\*oriented\*\* paradigms.
    In a first aspect the invention provides a system configuration integrating an environment for...

...agent execution environment allows development to be performed by using the merits of both the \*\*object\*\*- and agent-\*\*oriented\*\* paradigms. The means for changing an agent into an object executes the processes of an ...represents an object execution environment for executing a module which is implemented with functions of \*\*object\*\*-\*\*oriented\*\* paradigm, and reference numeral 2 represents an agent execution environment for executing a module which is implemented with functions of agent-\*\*oriented\*\* paradigm. The \*\*object\*\* execution environment 1 may use ORB

(Object Request Broker) products described in Prior Art 2...

...With such a system configuration, a system developer can retain the merits of both the **object**- and agent-**oriented** paradigms, for example, implementing a stable operation function by using objects and a function with...which a mobile agent is enciphered at the originating environment into a specific transfer format **code** and the agent received at the destination environment is decoded which is then interpretatively analyzed...process. In the former case, five steps are executed, including an image input step, a **coded** text conversion step through character recognition, a structured document conversion step, a structured document generation...

...described input processes of an electronic document. Therefore, only the image input process and the **coded** text conversion through character recognition, respectively at the function layer, will be described with reference...to encode the image data into text data. After the coding is normally completed, the **coded** data is returned back to the registration management/control object. If not completed normally, a... the document and an identifier for identifying the link destination document (e.g., a national **code** and a national book number of JAPAN/MARC used by the National Diet Library). The...to the present invention, a system developer can develop using the merits of both the **object**- and agent-**oriented** paradigms, for example by implementing the function requiring stable operation by an object and the...

...CLAIMS comprising:
  a module implemented with an agent-oriented function (1);
  a module implemented with an **object**-**oriented** function (2); and
  means (5) for changing an agent into an object and executing said module
    implemented with an agent-oriented function as said module
    implemented with an **object**-**oriented** function.
  2. A document management system according to claim 1, wherein said module
    implemented with an **object**-**oriented** function includes a
    management/control object (8) for collectively managing and
    controlling objects in unit...

...11. A document management system according to claim 1, wherein said
    module implemented with an **object**-**oriented** function has a
    three-layer structure comprising:
  a presentation layer object (500) for providing a...12. A document
    management system according to claim 2, wherein said module
    implemented with an **object**-**oriented** function has a
    three-layer structure comprising:
  a presentation layer object for providing a user...

...13. A document management system according to claim 3, wherein said
    module implemented with an **object**-**oriented** function has a
    three-layer structure comprising:
  a presentation layer object for providing a user...

...14. A document management system according to claim 4, wherein said
    module implemented with an **object**-**oriented** function has a
    three-layer structure comprising:
  a presentation layer object for providing a user...

...15. A document management system according to claim 5, wherein said
    module implemented with an **object**-**oriented** function has a
    three-layer structure comprising:
  a presentation layer object for providing a user...

...16. A document management system according to claim 6, wherein said
    module implemented with an **object**-**oriented** function has a

. three-layer structure comprising:
a presentation layer object for providing a user...

...17. A document management system according to claim 7, wherein said
module implemented with an **object**-**oriented** function has a
three-layer structure comprising:
a presentation layer object for providing a user...

...18. A document management system according to claim 8, wherein said
module implemented with an **object**-**oriented** function has a
three-layer structure comprising:
a presentation layer object for providing a user...

...19. A document management system according to claim 9, wherein said
module implemented with an **object**-**oriented** function has a
three-layer structure comprising:
a presentation layer object for providing a user...

...20. A document management system according to claim 10, wherein said
module implemented with an **object**-**oriented** function has a
three-layer structure comprising:
a presentation layer object for providing a user...

3/K/3
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PATENT ASSIGNEE:
  **HITACHI**, LTD...

...applicant designated states: DE;FR;GB;IT)
  **HITACHI** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system  registers each composed of 32 bits. The RISC type
  instruction set has its instruction **code** efficient by  an instruction
  having a fixed length of 16 bits. An  unconditional/conditional branching
  ...a divider unit DIVU. The divider unit DIVU of this  embodiment
  performs a division of **coded** 64 bits 32  bits or 32 bits 32 bits to
  determine a quotient of  32...having a fixed length instruction of  16
  bits is estimated to have a smaller object **code**  size than that of
  the RISC processor having a fixed  length instruction of 32 bits. For a
  small **code** size,  the number of bytes to be fetched is reduced, if
  instructions of the same...

...however, the RISC architecture of 32  bits were changed to that of 16
  bits, the **code** size    would not be one half. This is because the
  maximum to  be incorporated as...

...use a plurality of  instructions. Since the number of bits becomes short
  as an instruction **code**, one instruction may be two  instructions so
  as to change a three-operand address  into...

...values of registers before the  operation instruction.
    In order to inspect this, therefore, the object  **code** sizes
  produced for the single-chip microcomputer  according to the present
  invention were examined. The...

...than those of the aforementioned fixed length of 16    bits. In other
  words, the object **code** size of the  instruction having the fixed
  length of 16 bits is  smaller by 30...

...or the 32-bit RISC  architecture is changed to a 16-bit one, the object

**code** size is reduced to 2/3, and the number of  instructions to be
executed is...leaves the    assembler language and comes close to the
C-language  and further to an **object** **oriented** language such as
the  C++ language in connection with a portion of  applications while
introducing the **object**-**orientation**.  In this situation, the
interruption of the program  execution at the unit of statement and...36,
the CPU is constructed of: an     instruction register IR for temporarily
latching the  instruction **code** which is read out of the cache memory
through the data bus (or cache bus...

...unit for producing a control signal for an instruction  execution unit
by decoding the instruction **code** read  out; and the instruction
execution unit for executing  the arithmetic operations. In the
instruction...
...are connected with internal buses A, B and  C.
   The CPU reads out the instruction **code** latched in  the cache memory
CAM through the data bus DBI and  fetches it into the instruction
register IR. The  instruction **code** thus fetched is decoded by the
control unit to output the control signal for the...is copied in all the
bits of the register HRH so as to extend the **code** of  the dividend.
At the end of the operation, the  remainder of the result is...is used at
the first cycle of the  non-regression method to determine the "MSB (
**code**) of  the previous arithmetic result".

   (3) Non-Regression Method ("100011" - "001110"):
      The processing of the...


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PATENT ASSIGNEE:
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...applicant designated states: DE;FR;GB;IT)
   **HITACHI** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system  registers each composed of 32 bits. The RISC type
instruction set has its instruction **code** efficient by  an instruction
having a fixed length of 16 bits. An  unconditional/conditional branching
...a divider unit DIVU. The divider unit DIVU of this  embodiment
performs a division of **coded** 64 bits 32  bits or 32 bits 32 bits to
determine a quotient of  32...having a fixed length instruction of  16
bits is estimated to have a smaller object **code**  size than that of
the RISC processor having a fixed  length instruction of 32 bits. For a
small **code** size,  the number of bytes to be fetched is reduced, if
instructions of the same...

...however, the RISC architecture of 32  bits were changed to that of 16
bits, the **code** size    would not be one half. This is because the
maximum to  be incorporated as...

...use a plurality of  instructions. Since the number of bits becomes short
as an instruction **code**, one instruction may be two  instructions so
as to change a three-operand address   into...

...values of registers before the  operation instruction.
   In order to inspect this, therefore, the object  **code** sizes
produced for the single-chip microcomputer  according to the present
invention were examined. The...

...than those of the aforementioned fixed length of 16    bits. In other

words, the object **code** size of the  instruction having the fixed
length of 16 bits is  smaller by 30...

...or the 32-bit RISC  architecture is changed to a 16-bit one, the object
**code** size is reduced to 2/3, and the number of  instructions to be
executed is...leaves the   assembler language and comes close to the
C-language  and further to an **object** **oriented** language such as
the  C++ language in connection with a portion of  applications while
introducing the **object**-**orientation**.  In this situation, the
interruption of the program  execution at the unit of statement and...36,
the CPU is constructed of: an    instruction register IR for temporarily
latching the  instruction **code** which is read out of the cache memory
through the data bus (or cache bus...

...unit for producing a control signal for an instruction  execution unit
by decoding the instruction **code** read  out; and the instruction
execution unit for executing  the arithmetic operations. In the
instruction...
...are connected with internal buses A, B and  C.
   The CPU reads out the instruction **code** latched in  the cache memory
CAM through the data bus DBI and  fetches it into the instruction
register IR. The  instruction **code** thus fetched is decoded by the
control unit to output the control signal for the...is copied in all the
bits of the register HRH so as to extend the **code** of  the dividend.
At the end of the operation, the  remainder of the result is...is used at
the first cycle of the  non-regression method to determine the "MSB (
**code**) of  the previous arithmetic result".

   (3) Non-Regression Method ("100011" - "001110"):
     The processing of the...

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PATENT ASSIGNEE:
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...applicant designated states: DE;FR;GB;IT)
   **HITACHI** MICROCOMPUTER SYSTEM LTD...

...SPECIFICATION system registers each composed of 32 bits. The RISC type
   instruction set has its instruction **code** efficient by an instruction
   having a fixed length of 16 bits. An unconditional/conditional branching
   ...a divider unit DIVU. The divider unit DIVU of this embodiment performs
   a division of **coded** 64 bits 32 bits or 32 bits 32 bits to determine a
   quotient of 32...having a fixed length instruction of 16 bits is
   estimated to have a smaller object **code** size than that of the RISC
   processor having a fixed length instruction of 32 bits. For a small
   **code** size, the number of bytes to be fetched is reduced, if
   instructions of the same...

...however, the RISC architecture of 32 bits were changed to that of 16
   bits, the **code** size  would not be one half. This is because the
   maximum to be incorporated as...

...use a plurality of instructions. Since the number of bits becomes short
   as an instruction **code**, one instruction may be two instructions so as
   to change a three-operand address into...

...values of registers before the operation instruction.
     In order to inspect this, therefore, the object **code** sizes produced

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for the single-chip microcomputer according to the present invention were
examined. The...

...than those of the aforementioned fixed length of 16  bits. In other
words, the object **code** size of the instruction having the fixed
length of 16 bits is smaller by 30...

...or the 32-bit RISC architecture is changed to a 16-bit one, the object
**code** size is reduced to 2/3, and the number of instructions to be
executed is...leaves the  assembler language and comes close to the
C-language and further to an **object** **oriented** language such as the
C++ language in connection with a portion of applications while
introducing the **object**-**orientation**. In this situation, the
interruption of the program execution at the unit of statement and...36,
the CPU is constructed of: an  instruction register IR for temporarily
latching the instruction **code** which is read out of the cache memory
through the data bus (or cache bus...

...unit for producing a control signal for an instruction execution unit by
decoding the instruction **code** read out; and the instruction execution
unit for executing the arithmetic operations. In the instruction...
...are connected with internal buses A, B and C.
    The CPU reads out the instruction **code** latched in the cache memory
CAM through the data bus DBI and fetches it into the instruction register
IR. The instruction **code** thus fetched is decoded by the control unit
to output the control signal for the...is copied in all the bits of the
register HRH so as to extend the **code** of the dividend. At the end of
the operation, the remainder of the result is...is used at the first
cycle of the non-regression method to determine the "MSB (**code**) of
the previous arithmetic result".
  (3) Non-Regression Method ("100011" - "001110"):
    The processing of the...

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PATENT ASSIGNEE:
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...SPECIFICATION improvement and recognition accuracy, the reader has
employed a knowledge controlled pattern recognition technique, where
**object**-**oriented** information are explanatorily separated from the
analysis process and formalized as knowledge (low level knowledge...the
results of recognition of the character strings; a column 923 indicative
of data of **codes** of the characters of the recognized character
string; and a column 924 indicative of the...of recognition, and, when it
is found that the result of recognition is suitable, the **code** of the
character is stored in the character string table 920 as character
**code** data 923. It is to be noted herein that steps 360 and 370 are
exchangeable...

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PATENT ASSIGNEE:
    **Hitachi**, Ltd...

...SPECIFICATION Computer, April 24 Issue, 1989, pp. 81 to 92. This
interface is featured in an **object**-**oriented** environment.

The above-described conventional techniques do not consider the
handwriting environment allowing a realistic...and its process
environment capable of recognizing a handwritten stroke and converting it
into a **code** of a character, graphics, line, or edit symbol, and that
the screen of the handwriting...

...be recognized and not recognized, and an inputted handwritten stroke is
converted into a predetermined **code** data or image data in
correspondence with the data inputted area.
    The handwriting coordinate input...

...a mechanism allowing to describe a recognition function to convert a
hanwritten stroke into a **code** and a process function to use a
network. Therefore, it is possible to configure an...will be described
later, this language is a dedicated handwriting interpreter using the
concept of **object**-**oriented** programming recently highlighted as a
man-machine interface, which is characterized particularly in management
and...direction. When another end point comes, in accordance with the
obtained data (e.g., quantum **codes** in the four directions), a
U-character shaped rectangular area is separated.

(iii) A method...

...string when defining a character screen, and by searching the mapping
coordinates and a blank **code** in the character string.
    Instead of the automatic area deriving methods described above, other
methods...

...executed to generate the UI/HAND-TANK definition data T200. This data is
an intermediate **code** and interpreted and executed by the interpreter
shown in Fig. 11.
    The detailed flow chart...

...using the already defined formatted document. This process is executed
by using the above-described **object**-**oriented** programming scheme.
The fundamental concept of this scheme will first be described, and then
the...another object to execute some process. This request is conducted
through message activation of the **object**-**oriented** programming. A
message activation has the following format.

  SEND object name message name (parameter)
    The...

...messages 1 to 3 represent the message names.
    As described so far, according to the **object**-**oriented**
programming, objects are sequentially processed by means of event
activation and message activation.
    After all...

...character, and a document is transferred to a mail destination
represented by this recognized character **code**.
    Statements at lines 1 to 3 in Fig. 21 describe a definition of the type
...this type is an upper case alphabet ALPHA(underscore)L type and only
the character **codes** for H, I, T, A, and C are permitted. Therefore,
if an area is defined...

...a specification area G720 often uses characters specific to the entered
item name. If particular **codes** for that item name are declared in
advance, it is possible to give an alarm...

...object is transferred (at lien 14). Then, there is transferred a message
indicating that the **code** representative of the recognition results is
registered as the receiver name (at line 15). Lastly...message "edit

wird.
13. Vorrichtung nach einem der Anspruche 1 bis 3, bei der ein
    Handschrifteneingabeglas...
...CLAIMS ou plusieurs traits manuscrits dans ladite unite d'entree
    d'ecriture manuscrite (H211) comme un **code** predetermine, et
    executer ladite operation de traitement decrite.
3. Dispositif selon la revendication 1, dans...

...edition, respectivement, incluent un descriptif pour designer une plage
    admise pour designer un ou plusieurs **codes** d'objet de
    reconnaissance et un traitement d'execution pour ledit descriptif.
10. Dispositif selon...

...selon la revendication 8, dans lequel, lorsqu'un trait du type edition
    est entre, un **code** a editer sous les coordonnees dudit trait est
    discrimine, et un traitement d'edition est execute conformement au
    type dudit **code**.
13. Dispositif selon l'une quelconque des revendications 1 a 3, dans
    lequel une vitre...

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...SPECIFICATION a program.
    The knowledge processing system generally comprises a knowledge base
which stores therein knowledges **coded** in a machine-readable form for
use in solving a problem and an inference program...the table 1 mentioned
below is represented in the form of rules by adopting an **object**-
**oriented** programming procedure. The general-purpose search program
contains rule groups for initialization, labeling, search execution...
operators, respectively. These programs are described in a C-language by
making use of the **object**-**oriented** programming procedure.
    In the preparation of the knowledge base according to the instant
embodiment described...The general-purpose search program is a program
represented in rule forms by using an **object** **oriented** programming
procedure, as in the case of the first embodiment. Thus, this

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PATENT ASSIGNEE:
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...SPECIFICATION relates to a method and an apparatus for image recognition
to calculate the position and **orientation** of an **object** article
and, more particularly, to a method and an apparatus for **calculating**
the position **and** **orientation** of a whole object article inclusive
of its partial shapes by computing the linear equations...

...feature points are obtained, at least two feature points are identified
by checking the data **relating** to the **distances** of said at least
two feature points from other feature points with reference to stored...

...each one of a plurality of feature points and the other feature points
and the **orientation** **of** said **object** article is determined
based on a direction through said at least two identified feature points

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Set	Items	Description
S1	7324	PA="HITACHI"
S2	21	S1 AND OBJECT(2N)ORIENT?
S3	9	S2 AND CODE?
S4	1	AU="NAYA HIDEMITSU"
S5	3	AU="YOKOYAMA TAKANORI"

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Navigation system and information medium for the navigation system
Navigationssystem und Speichermedium dafur
**Systeme de navigation et support d'information pour le systeme de
    navigation**
PATENT ASSIGNEE:
  Hitachi, Ltd., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
    101, (JP), (applicant designated states: DE;FR;GB)
INVENTOR:
  Naya, Hidemitsu, Moriyama APT 2-201, 17, Moriyama-cho 3-chome,
    Hitachi-shi, Ibaraki 316, (JP)
  Fukunaga, Yasushi, 5-2, Mikanohara-cho 2-chome, Hitachi-shi, Ibaraki 316,
    (JP)
  Nakamura, Kozo, 628-2, Baba-cho, Hitachioota-shi, Ibaraki 313, (JP
LEGAL REPRESENTATIVE:
  Beetz & Partner Patentanwalte (100712), Steinsdorfstrasse 10, 80538
    Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 833289 A1 980401 (Basic)
APPLICATION (CC, No, Date):   EP 97115932 970912;
PRIORITY (CC, No, Date): JP 96254678 960926
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G08G-001/0968
ABSTRACT WORD COUNT: 169

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9814	669
SPEC A	(English)	9814	6868
Total word count - document A			7537
Total word count - document B			0
Total word count - documents A + B			7537

5/3/1
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00257396
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A data display method.
Anzeigeverfahren.
Methode d'affichage.
PATENT ASSIGNEE:
  HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
    101, (JP), (applicant designated states: DE;GB)
INVENTOR:
  Tani, Masayuki, Kouwa-Ryou B-412 3-8-18 Kokubu-cho, Hitachi-shi Ibaraki

316, (JP)
Nakanishi, Kunio, Kouwa-Ryou B-413 3-8-18 Kokubu-cho, Hitachi-shi Ibaraki
     316, (JP)
Kawabata, Atsushi, Yuuhou-Ryou 403 6-20-3 Ayukawa-cho, Hitachi-shi
     Ibaraki 316, (JP)
Watanabe, Norito, Yuuhou-Ryou 210 6-20-3 Ayukawa-cho, Hitachi-shi Ibaraki
     316, (JP)
Yokoyama, Takanori, 1283 Shimokawai-cho, Hitachioota-shi Ibaraki 313,
     (JP)
Tanifuji, Shinya, 2-20-1 Daihara-cho, Hitachi-shi Ibaraki 316, (JP
LEGAL REPRESENTATIVE:
Patentanwalte Beetz - Timpe - Siegfried Schmitt-Fumian - Mayr (100712),
     Steinsdorfstrasse 10, D-80538 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 255699 A2 880210 (Basic)
                               EP 255699 A3 900627
                               EP 255699 B1 950927
APPLICATION (CC, No, Date):   EP 87111041 870730;
PRIORITY (CC, No, Date): JP 86178659 860731
DESIGNATED STATES: DE; GB
INTERNATIONAL PATENT CLASS: G06T-011/80; G06F-003/033;
ABSTRACT WORD COUNT: 151

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
        CLAIMS A   (English)   EPABF1   404
        CLAIMS B   (English)   EPAB95   612
        CLAIMS B   (German)   EPAB95   496
        CLAIMS B   (French)   EPAB95   663
        SPEC A   (English)   EPABF1   3595
        SPEC B   (English)   EPAB95   3356
Total word count - document A   3999
Total word count - document B   5127
Total word count - documents A + B   9126

5/3/2
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

00160628
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
**Method and apparatus for recognizing and displaying handwritten characters
     and figures.**
**Verfahren und Anlage zum Erkennen und Anzeigen handgeschriebener Zeichen
     und Figuren.**
**Procede et dispositif de reconnaissance et affichage de caracteres et
     figures manuscrites.**
PATENT ASSIGNEE:
HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
     100, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI;NL;SE)
INVENTOR:
Fukunaga, Yasushi, 17-2-503, Moriyamacho-3-chome, Hitachi-shi, (JP)
Kuzunuki, Soshiro, 3600-150, Nakane, Katsuta-shi, (JP)
Shojima, Hiroshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
Yokoyama, Takanori, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi,
     (JP)
Koga, Kazuyoshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
Hirasawa, Kotaro, 10-7, Kanesawacho-7-chome, Hitachi-shi, (JP)
Kawada, Shinichi, 1382-8, Arajukucho, Hitachiota-shi, (JP
LEGAL REPRESENTATIVE:
Patentanwalte Beetz - Timpe - Siegfried Schmitt-Fumian - Mayr (100712)
     , Steinsdorfstrasse 10, D-80538 Munchen, (DE)

```
PATENT (CC, No, Kind, Date):   EP 156394  A2  851002 (Basic)
                               EP 156394  A3  880831
                               EP 156394  B1  930714
APPLICATION (CC, No, Date):    EP 85103823 850329;
PRIORITY (CC, No, Date): JP 8460717 840330
DESIGNATED STATES: CH; DE; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: G06K-009/22;
ABSTRACT WORD COUNT: 123
```

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	516
CLAIMS B	(German)	EPBBF1	452
CLAIMS B	(French)	EPBBF1	597
SPEC B	(English)	EPBBF1	3736
Total word count - document A			0
Total word count - document B			5301
Total word count - documents A + B			5301

5/3/3
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 1999 EUROPEAN PATENT OFFICE. All rts. reserv.

00160450
ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348
**Method   for   designating   a   recognition   mode   in   a   hand-written
   character/graphic recognizer.**
**Verfahren   zum   Bezeichnen   einer   Erkennungsart   in   einem   Gerat   zur   Erkennung
   handgeschriebener Zeichen/Grafiken.**
**Procede   pour   designer   un   mode   de   reconnaissance   dans   un   dispositif   de
   reconnaissance de caracteres manuscrits/graphiques.**
PATENT ASSIGNEE:
  HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
    100, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI;NL;SE)
INVENTOR:
  Kuzunuki, Soshiro, 3600-150, Nakane, Katsuta-shi, (JP)
  Shojima, Hiroshi, c/o HITACHI, LTD. 6, Kanda Surugadai 4-chome,
    Chiyoda-ku Tokyo, (JP)
  Yokoyama, Takanori, c/o HITACHI, LTD. 6, Kanda Surugadai 4-chome,
    Chiyoda-ku Tokyo, (JP)
  Fukunaga, Yasushi, 17-2-503, Moriyamacho-3-chome, Hitachi-shi, (JP)
  Hirasawa, Kotaro, 10-7, Kanesawacho-7-chome, Hitachi-shi, (JP
LEGAL REPRESENTATIVE:
  Patentanwalte Beetz sen. - Beetz jun. Timpe - Siegfried -
    Schmitt-Fumian (100711), Steinsdorfstrasse 10, W-8000 Munchen 22, (DE)

```
PATENT (CC, No, Kind, Date):   EP 157354  A2  851009 (Basic)
                               EP 157354  A3  880914
                               EP 157354  B1  920115
APPLICATION (CC, No, Date):    EP 85103643 850327;
PRIORITY (CC, No, Date): JP 8458298 840328
DESIGNATED STATES: CH; DE; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: G06K-009/00; G06K-009/78;
ABSTRACT WORD COUNT: 83
```

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	672
CLAIMS B	(German)	EPBBF1	619
CLAIMS B	(French)	EPBBF1	853
SPEC B	(English)	EPBBF1	2936

```
show files;ds;t 7/3,k/all;t 9/3/all
File 275:GALE GROUP COMPUTER DB(TM) 1983-1999/JAN 05
         (c) 1999 THE GALE GROUP
File 674:COMPUTER NEWS FULLTEXT 1989-1999/DEC W2
         (c) 1999 IDG COMMUNICATIONS
File  16:GALE GROUP PROMT(R) 1990-1999/JAN 05
         (c) 1999 THE GALE GROUP
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File  15:ABI/INFORM(R) 1971-1999/Dec 15
         (c) 1999 Bell & Howell
File 148:GALE GROUP TRADE & INDUSTRY DB 1976-1999/JAN 05
         (c)1999 THE GALE GROUP
File 636:GALE GROUP NEWSLETTER DB(TM) 1987-1999/JAN 05
         (c) 1999 THE GALE GROUP
File 624:MCGRAW-HILL PUBLICATIONS 1985-1999/DEC 30
         (c) 1999 MCGRAW-HILL CO. INC
File   9:BUSINESS & INDUSTRY(R) JUL/1994-1999/JAN 03
         (c) 1999 RESP. DB SVCS.
File  88:GALE GROUP BUSINESS A.R.T.S. 1976-1999/DEC 29
         (c) 1999 THE GALE GROUP
File  47:GALE GROUP MAGAZINE DB(TM) 1959-1999/JAN 05
         (c) 1999 THE GALE GROUP
File  75:TGG Management Contents(R) 86-1999/Dec W1
         (c) 1999 The Gale Group
File 647:CMP  COMPUTER FULLTEXT 1988-1999/DEC W3
         (c) 1999 CMP
File 486: PRESS-TELEGRAM 1992- 1999/Dec 29
         (c) 1999 LONG BEACH PRESS-TELEGRAM
File 637:JOURNAL OF COMMERCE 1986-1999/DEC 30
         (c) 1999 JOURNAL OF COMMERCE INC
File 484:Periodical Abstracts Plustext 1986-1999/Nov W3
         (c) 1999 Bell & Howell
```

```
Set     Items   Description
S1          0   AU="NARISAWA F"
S2          0   AU="NAYA H"
S3          3   AU="YOKOYAMA, T":AU="YOKOYAMA, T."
S4          3   AU="OHKAWA, K."
S5         62   HITACHI?(5N)(OBJECT(2N)ORIENT?)
S6         20   S5 AND CODE?
S7         14   RD (unique items)
S8          6   S3 OR S4
S9          6   RD (unique items)
```

7/3,K/1   (Item 1 from file: 275)
DIALOG(R)File 275:GALE GROUP COMPUTER DB(TM)
(c) 1999 THE GALE GROUP. All rts. reserv.

01804821   SUPPLIER NUMBER: 17155728   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Client/server and host app. development tools.(1995 Database Buyer's Guide
and Client/Server Sourcebook)(Buyers Guide)**
DBMS, v8, n6, p20(13)
May 15, 1995
DOCUMENT TYPE: Buyers Guide   ISSN: 1041-5173   LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 20277   LINE COUNT: 01789

...   kit is equipped with 4D Insider, a cross-referencing utility. This
tool provides developers with **code** sharing and documentation generation
capabilities, and lets users create **code** libraries for quick **code**
development. Ad hoc reporting capabilities are provided through SQL
Reporter. Using the 4D Passport deployment...

applications with little or no **code** changes. Reader service #317.
    SQL **Coder** 1.6
    Platinum Technology Inc., Oakbrook Terrace, IL
    708-620-5000
    A team-oriented development...

...including Oracle and SQL Server. Provides for the creation,
organization, and management of database server **code** objects, including
stored procedures, triggers, scripts, packages, and functions. Objects are
stored as text in the SQL **Coder** repository. The repository is created
in a user's database and allows access to information...
...projects. Deployment function recognizes development, test, and
productivity servers and provides full reference checking. Provides
code reusability, faster implementation, and automatic **code**
comparison. Available for Windows and Windows NT at $795 for a single-user
license; $1995...

...C/C++ object-oriented, client/server applications that work with all
major databases. Users can **code** and deploy on multiple operating
systems (Windows, DOS, Windows NT, Unix, OS/2, and Windows 95) with no
code changes. Provides multilevel access and lets the user write one
set of **code** that can access all major databases. Customers can
prototype using one database and deploy using...

...be associated with screen objects, create and populate forms from
multiple data sources, and generate **code** for data access. Includes a
visual programming interface, API library, manual and online help, database
...level, designing a business model that becomes the foundation for the
client/server application. Smalltalk **code** is automatically generated.
Changes made to the model are reflected back into the **code** and vice
versa. Also offers a mapping tool component that quickly links object
models to...
...system design, and the application always remain synchronized. Provides
integration among business analysis, design, and **code** generation. Total
Synchronicity is integrated with Total Enfin Smalltalk programming
environment. $4045-$6995. Reader service...

...X from layout-only IDT products. It lets developers interactively
create, modify, test, and generate **code** for the behavioral portions of
their applications' user interfaces. Supports object-oriented development,
providing a...

...interfaces for existing keyboard-oriented applications. Generates C++,
K&R, or ANSI C, and UIL **code**, and contains enhancements to facilitate
object-oriented development in C++. Available for all major Unix...data
through the ObjectLens. Argos supports object modeling, using Rumbaugh
notation, and provides for synchronous **code** generation as models are
created and evolved. Users do not need to write **code**. It also keeps the
models and **code** in sync and provides a full visual programming
environment for creating applications that support drag-and-drop. Argos
also supports enterprise development through integrated versioning and
code management at the model level. The Versant ODBMS provides a
repository, allowing all development work...
...Digitalk Inc., Santa Ana, CA
    714-513-3000; 800-546-6400
    Designed to create application **code**. Available for Windows 3.1,
Windows NT, and OS/2, it is the successor to...support a range of
client/server models. Lets programmers develop the client and server code
simultaneously. Supports development of OS/2 and Windows 3.1 clients
and MVS/ESA, VSE/ESA...

7/3,K/2   (Item 2 from file: 275)

01671472   SUPPLIER NUMBER: 15064590   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Object lessons to be learnt. (includes related articl s on P troleum
  Science and Technology Institute's use of Object Design's Objectstore,
  object database and elevator manufacturer Schindler's use of **Hitachi**
  's **Object** IQ **object** **oriented** software)**
Mansell-Lewis, Emma
Computer Weekly, p30(2)
Jan 27, 1994
ISSN: 0010-4787   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1770   LINE COUNT: 00141

   **...use of Object Design's Objectstore, object database and elevator
   manufacturer Schindler's use of **Hitachi**'s **Object** IQ **object**
   oriented software)**

...ABSTRACT: offers the possibility of faster application development
cycles and the ability to reuse blocks of **code**, but many corporations
are unwilling to undertake the costs involved in converting to this new...
...   take a pure approach to object-oriented programming, you end up
writing thrid generation language **code**, which is like buying a fast car
and driving it in first gear. Yet don...

   ...DESCRIPTORS: Reusable **Code**

7/3,K/3   (Item 3 from file: 275)

01504728   SUPPLIER NUMBER: 12008036   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Minigrams.
Computergram International, n1890, CGI03310028
March 31, 1992
ISSN: 0268-716X   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT
WORD COUNT: 2593   LINE COUNT: 00212

...   Co and Hitachi Europe Ltd have signed a deal giving Hewlett the
right to distribute **Hitachi**'s **object**-**oriented** application
development tool ObjectIQ: there are 4,000 licences to the product in Japan
and...subscriber then calls Fax Mail from any touch-tone phone, enters a
personally-chosen security **code**, and enters the number of the fax
machine on which it is to be printed...

7/3,K/4   (Item 1 from file: 674)

053540
Uh-oh Cobol
22
**Early hype has painted a bright future for object-oriented Cobol
   programmers. The present reality: A pretty bleak job market**
Byline: Alan Radding
Journal: Computerworld   Page Number: 86
Publication Date: July 29, 1996
Word Count: 780   Line Count: 75

Text:
...Diego.

That gives it a familiar feel to programmers who move from procedural Cobol to **object**-**oriented** programming. Vendors such as IBM, **Hitachi** America Ltd. and Fujitsu America, Inc. are poised to make a big object Cobol splash...

...client/server computing.
``(It) will grow slowly. Its acceptance will occur because of the legacy **code**,'' Coker says. Expect to see object-oriented Cobol adopted first by those companies with large portfolios of proceduralCobol **code**, such as the insurance and financial industries. Acucobol's list of customers includes heavyweights such...

7/3,K/5   **(Item 1 from file: 16)**
DIALOG(R)File 16:GALE GROUP PROMT(R)
(c) 1999 THE GALE GROUP. All rts. reserv.

05677720   Supplier Number: 50160310   (USE FORMAT 7 FOR FULLTEXT)
GLOBAL SOFTWARE MARKET
Software Industry Report, p5
May 25, 1998
Language: English   Record Type: Fulltext
Article Type: Article
Document Type: Newsletter; Trade
Word Count: 834

    (USE FORMAT 7 FOR FULLTEXT)
TEXT:
Unisys, **Hitachi** Ltd. Team Up On **Object**-**Oriented** Software
...   the Unisys ClearPath HMP IX system. The agreement provides Unisys worldwide license rights to selected **Hitachi** **object**-**oriented** COBOL technologies including its compiler front-end, class libraries, object browser, file/record designer and...

...IX systems for COBOL development and first phase compile and the OS2200 node for final **code** generation and runtime execution.
     Scotland's First Software Center
     Opens In Silicon Valley
     Scotland, hungry...

7/3,K/6   **(Item 2 from file: 16)**
DIALOG(R)File 16:GALE GROUP PROMT(R)
(c) 1999 THE GALE GROUP. All rts. reserv.

04244377   Supplier Number: 46214471   (USE FORMAT 7 FOR FULLTEXT)
Cobol Gets With Objects
InformationWeek, p70
March 11, 1996
Language: English   Record Type: Fulltext
Document Type: Magazine/Journal; Tabloid; General Trade
Word Count: 2695

...   language moves toward standardization. InformationWeek's OpenLabs recently took a look at three versions of **Object**-**oriented** Cobol:
     * **Hitachi** America Ltd.'s **Object**-**Oriented** Cobol version 2.0
     * IBM VisualAge for Cobol version 1.0
     * Micro Focus Inc.'s...

...in various stages of development. Each vendor has taken a slightly different tack in offering **Object**-**oriented** Cobol products. **Hitachi** prefers to play it safe, solid, and by the book. IBM builds on its System...

...that the data structure behind DBMgr may be changed without affecting the rest of the **code**.
     The Object Management Group, a consortium of more than 300 software vendors, is defining bindings...

...in a language-neutral fashion. Oracle8, due by year's end, will support object storage.
     Hitachi **Object**-**Oriented** Cobol
     Although **Hitachi** is an unknown quantity to most software developers in the United States, it has developed...

...for the second quarter), it does offer an attractive and easy-to-use windowing environment.
     Hitachi's **Object**-**Oriented** Cobol runs on Windows NT machines. **Hitachi** also offers **Object**-**oriented** Cobol compilers for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and...of innovation, honest capabilities that are easy to understand and use.
     For CICS programmers, the **Code** Assistant removes much of the tedium of writing parameter lists. A Transaction Assistant accepts specifications using screen forms and automatically generates the necessary CICS **code**.
     At the heart of VisualAge for Cobol is SOM, IBM's Common Object Request Broker...
...a decade. It now finds itself in the unfamiliar position of playing catch-up to **Hitachi** in supporting **object**-**oriented** extensions. But **Hitachi**'s lead is not insurmountable. Micro Focus offers a visual programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class and the source **code**. The Palo Alto, Calif., developer should be commended for providing the base class source **code**; it is an excellent laboratory for programmers looking to understand how to program for reuse
...

...investigation.
     Another problem is that the Run-Time System at times simply refuses to allow **code** with errors to be animated, leaving the programmer completely in the dark as to ...spreadsheet; The benefit is in reducing the amount of time Cobol programmers spend maintaining legacy **code** and in reducing the development cycle for new applications.
     Businesses that can develop their own...

...to keep them compatible.
     C++ is not a proper superset of C; perfectly legal C **code** may break under a C++ compiler. In marketing-speak, the phrase to cover this incompatibility...

7/3,K/7   (Item 3 from file: 16)
DIALOG(R)File 16:GALE GROUP PROMT(R)
(c) 1999 THE GALE GROUP. All rts. reserv.

03636808   Supplier Number: 45129362   (USE FORMAT 7 FOR FULLTEXT)
CENTERLINE TOUTS ITS OBJECT-ORIENTED TOOL SET, CLAIMING IT's THE REAL THING FOR **CODE RE-USE**
Computergram International, n2541, pN/A
Nov 10, 1994
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 568

   (USE FORMAT 7 FOR FULLTEXT)

Karen Lehman EIC 3600 306-5783 13:49 January 3, 2000

CENTERLINE TOUTS ITS OBJECT-ORIENTED TOOL SET, CLAIMING IT's THE REAL THING FOR **CODE** RE-USE

TEXT:

...latest tool to support re-use in a meaningful way. It is not the first **object** -**oriented** package with this aim; **Hitachi** Ltd already offers an Object Re-use Library, however, CenterLine's chief technical officer Dave...

...   to enable users to find and pull out software assets such as source and object **code** and analysis and design documents. According to Reed, ResourceCenter has deliberately been designed as a...

...it has already for software re-use, but CenterLine, best known for its ObjectCenter and **CodeCenter** Unix programming environments, remains convinced that putting out tools such as this will eventually goad...

7/3,K/8   (Item 1 from file: 15)
DIALOG(R)File   15:ABI/INFORM(R)
(c) 1999 Bell & Howell. All rts. reserv.

01258902 99-08298
Uh-oh Cobol
Radding, Alan
Computerworld v30n31 PP: 86 Jul 29, 1996
ISSN: 0010-4841 JRNL CODE: COW
WORD COUNT: 905

...ABSTRACT: oriented Cobol will be adopted first by those companies with large portfolios of procedural Cobol **code**, such as the insurance and financial industries. Although the signs may look bright for the...
...TEXT: Diego.

That gives it a familiar feel to programmers who move from procedural Cobol to **object**-**oriented** programming. Vendors such as IBM, **Hitachi** America Ltd. and Fujitsu America, Inc. are poised to make a big object Cobol splash...

...client/server computing.

"[It] will grow slowly. Its acceptance will occur because of the legacy **code**," Coker says. Expect to see object-oriented Cobol adopted first by those companies with large portfolios of procedural Cobol **code**, such as the insurance and financial industries. Acucobol's list of customers includes heavyweights such...

7/3,K/9   (Item 1 from file: 148)
DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB
(c)1999 THE GALE GROUP. All rts. reserv.

10128190   SUPPLIER NUMBER: 20507480   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Unisys and **Hitachi** Ltd., Collaborate on **Object**-**Oriented** Software.
Business Wire, p4220047
April 22, 1998
LANGUAGE: English   RECORD TYPE: Fulltext
WORD COUNT: 785   LINE COUNT: 00075

Unisys and **Hitachi** Ltd., Collaborat on **Object**-**Oriented** Softwar .
     TOKYO--(BUSINESS WIRE)--April 23, 1998--
        Unisys licenses object technology from **Hitachi**
        and jointly develops **Object**-**Oriented** COBOL on ClearPath HMP

Karen Lehman EIC 3600 306-5783 13:49 January 3, 2000

IX
Unisys Corp. and Hitachi Ltd., today announced that they are...

...the Unisys ClearPath HMP IX system.
The agreement provides Unisys worldwide license rights to selected
Hitachi **object**-**oriented** COBOL technologies including its
compiler front-end, class libraries, object browser, file/record designer
and...
...IX systems for COBOL development and first phase compile and the OS2200
node for final **code** generation and runtime execution.
The resulting product will provide full COBOL 85 compatibility along
with...

...fit," said Brian Hadfield, vice president and general manager of the
Unisys ClearPath Business Initiative.
"**Hitachi** is focusing on developing **object**-**oriented**
technology and expanding the market," noted Mitsuhiko Kodaira, general
manager of Hitachi's Software Development Center. "**Hitachi** added
object-**oriented** functionality to COBOL in 1994 in the first
implementation of Object-Oriented COBOL in the...

7/3,K/10   (Item 2 from file: 148)
DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB
(c)1999 THE GALE GROUP. All rts. reserv.

08532615   SUPPLIER NUMBER: 18082520   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cobol gets with objects. (IBM VisualAge for Cobol; **Hitachi **Object**-**Oriented** Cobol 2.0; Micro Focus Visual Object Cobol)(includes related article on new ANSI standard) (Software Review)(Evaluation)**
Arranga, Edmund C.
InformationWeek, n570, p70(6)
March 11, 1996
DOCUMENT TYPE: Evaluation   ISSN: 8750-6874   LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2917   LINE COUNT: 00237

Cobol gets with objects. (IBM VisualAge for Cobol; **Hitachi **Object**-**Oriented** Cobol 2.0; Micro Focus Visual Object Cobol)(includes related article on new ANSI standard...**

...ABSTRACT: Web integration. All three tested products implement a subset
of the ANSI Cobol 97 standard. **Hitachi** America Ltd's **Object**-
Oriented Cobol 2.0 concentrates on object-oriented features and does
not yet offer a visual...
...   language moves toward standardization. InformationWeek's OpenLabs
recently took a look at three versions of **Object**-**oriented** Cobol:
* **Hitachi** America Ltd.'s **Object**-**Oriented** Cobol version 2.0
* IBM VisualAge for Cobol version 1.0
* Micro Focus Inc.'s...

...in various stages of development. Each vendor has taken a slightly
different tack in offering **Object**-**oriented** Cobol products.
Hitachi prefers to play it safe, solid, and by the book. IBM builds on
its System...

...that the data structure behind DBMgr may be changed without affecting
the rest of the **code**.
The Object Management Group, a consortium of more than 300 software
vendors, is defining bindings...

...in a language-neutral fashion. Oracle8, due by year's end, will support
object storage.

Karen Lehman EIC 3600 306-5783 13:49 January 3, 2000

Hitachi **Object**-**Oriented** Cobol

Although **Hitachi** is an unknown quantity to most software developers in the United States, it has developed...
...for the second quarter), it does offer an attractive and easy-to-use windowing environment.

Hitachi's **Object**-**Oriented** Cobol runs on Windows NT machines. **Hitachi** also offers **Object**-**oriented** Cobol compilers for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and...of innovation, honest capabilities that are easy to understand and use.

For CICS programmers, the **Code** Assistant removes much of the tedium of writing parameter lists. A Transaction Assistant accepts specifications using screen forms and automatically generates the necessary CICS **code**.

At the heart of VisualAge for Cobol is SOM, IBM's Common Object Request Broker...

...a decade. It now finds itself in the unfamiliar position of playing catch-up to **Hitachi** in supporting **object**-**oriented** extensions. But **Hitachi**'s lead is not insurmountable. Micro Focus offers a visual programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class and the source **code**. The Palo Alto, Calif., developer should be commended for providing the base class source **code**; it is an excellent laboratory for programmers looking to understand how to program for reuse ...

...investigation.

Another problem is that the Run-Time System at times simply refuses to allow **code** with errors to be animated, leaving the programmer completely in the dark as to ...spreadsheet; The benefit is in reducing the amount of time Cobol programmers spend maintaining legacy **code** and in reducing the development cycle for new applications.

Businesses that can develop their own...

...to keep them compatible.

C++ is not a proper superset of C; perfectly legal C **code** may break under a C++ compiler. In marketing-speak, the phrase to cover this incompatibility...

...TRADE NAMES: **Hitachi** **Object**-**Oriented** Cobol 2.0 (Application development software

7/3,K/11   (Item 3 from file: 148)
DIALOG(R)File 148:GALE GROUP TRADE & INDUSTRY DB
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05193017   SUPPLIER NUMBER: 10903814   (USE FORMAT 7 OR 9 FOR FULL TEXT)
World IT sales grow 8.9% to $278.5B; North America hits $184.7B. (the top 100 revenue earners in the information technology industry) (includes related profiles of the Datamation 100 companies) (Cover Story)
Kelly, Joseph
Datamation, v37, n12, p10(53)
June 15, 1991
DOCUMENT TYPE: Cover Story   ISSN: 1062-8363   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 46795   LINE COUNT: 03697

...   its second relational database software partner. HP will team up with Sun to jointly develop **object**-**oriented** software technology. **Hitachi** Ltd. has decided to collaborate on developing expert systenis applications. Computer Associates International Inc. will...revenues beyond

$1 billion. And it funded much work on an important new storage product, **code**-named Iceberg.

The person who bet the Colorado ranch on the 4400 and Iceberg is... coming years.

Motorola's overall is business, which consists of the Computer Group and the **Codex** Corp. and UDS/Motorola data communications subsidiaries, accounted for $954 million in sales in 1990...

...rose 13% for Motorola, while net earnings were essentially Hat at just under $500 million.

Codex has been struggling to make the transition from analog to digital technology and position itself...

...it posted an operating loss of $1 million in 1990. Important new products introduced by **Codex** included release 3 of the **Codex** 9800 Series Network Management System. Sales and orders at UDS/Motorola rose primarily on the...

...IS activity is providing information systems for the health care market through products such as **Code** 3, Health Evaluation and MedLab. DATAMATION estimates the health group's sales at about $75...users;
    * Provide systems reengineering, which means making the most of a user organization's existing **code** and systems architecture;
    * Create industry-specific software for markets in which the firm specializes-notably...is the market for computer-aided software engineering (CASE) tools. Second, its plans to "push **code**" to the UNIX operating system and to workstation platforms such as, perhaps, the IBM RS...

7/3,K/12   (Item 1 from file: 636)
DIALOG(R)File 636:GALE GROUP NEWSLETTER DB(TM)
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03878996   Supplier Number: 48475628   (USE FORMAT 7 FOR FULLTEXT)
Unisys, **Hitachi** Team On **Object**-**Oriented** Software
High Performance Computing & Communications Week, v7, n19, pN/A
May 11, 1998
Language: English   Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 169

   (USE FORMAT 7 FOR FULLTEXT)
Unisys, **Hitachi** Team On **Object**-**Oriented** Software
TEXT:
...the Unisys ClearPath HMP IX system. The agreement provides Unisys worldwide license rights to selected **Hitachi** **object**-**oriented** COBOL technologies including its compiler front-end, class libraries, object browser, file/record designer and...
 ...   IX systems for COBOL development and first phase compile and the OS2200 node for final **code** generation and runtime execution.
    COPYRIGHT 1998 King Communication Group, Inc.

7/3,K/13   (Item 2 from file: 636)
DIALOG(R)File 636:GALE GROUP NEWSLETTER DB(TM)
(c) 1999 THE GALE GROUP. All rts. reserv.

03868001   Supplier Number: 48439057   (USE FORMAT 7 FOR FULLTEXT)
UNISYS: Unisys and **Hitachi**, Ltd., collaborate on **object**-
 orient d software
M2 Presswire, pN/A
April 23, 1998
Language: English   Record Type: Fulltext

Document Type: Newswire; Trade
Word Count: 776

(USE FORMAT 7 FOR FULLTEXT)
UNISYS: Unisys and **Hitachi, Ltd., collaborate on **object**-
oriented software**
TEXT:
M2 PRESSWIRE-23 April 1998-UNISYS: Unisys and **Hitachi**, Ltd.,
collaborate on **object**-**oriented** software (C)1994-98 M2
COMMUNICATIONS LTD
     RDATE:220498
     -- Unisys licenses object technology from **Hitachi** and jointly
develops **Object**-**Oriented** COBOL on ClearPath HMP IX
     Tokyo, Japan, April 23, 1998 -- Unisys Corporation and Hitachi, Ltd...
...the Unisys ClearPath HMP IX system. The agreement provides Unisys
worldwide license rights to selected **Hitachi** **object**-**oriented**
COBOL technologies including its compiler front-end, class libraries,
object browser, file/record designer and...

...IX systems for COBOL development and first phase compile and the OS2200
node for final **code** generation and runtime execution.
     The resulting product will provide full COBOL 85 compatibility along
with...

...fit," said Brian Hadfield, vice president and general manager of the
Unisys ClearPath Business Initiative.
     "**Hitachi** is focusing on developing **object**-**oriented**
technology and expanding the market.", notes Mitsuhiko Kodaira, general
manager of Hitachi's Software Development Center. "**Hitachi** added
.**object**-**oriented** functionality to COBOL in 1994 in the first
implementation of Object-Oriented COBOL in the...

7/3,K/14   (Item 1 from file: 647)
DIALOG(R)File 647:CMP COMPUTER FULLTEXT
(c) 1999 CMP. All rts. reserv.

01084253   CMP ACCESSION NUMBER: IWK19960311S0051
Product Review - Cobol Gets With Objects
Edmund C. Arranga
INFORMATIONWEEK, 1996, n 570, PG70
PUBLICATION DATE: 960311
JOURNAL CODE: IWK   LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: OpenLabs
WORD COUNT: 2445

...   language moves toward standardization. InformationWeek's OpenLabs
recently took a look at three versions of **Object**-**oriented** Cobol:
     Hitachi America Ltd.'s **Object**-**Oriented** Cobol version 2.0
     IBM VisualAge for Cobol version 1.0
     Micro Focus Inc.'s...

...in various stages of development. Each vendor has taken a slightly
different tack in   offering **Object**-**oriented** Cobol products.
Hitachi prefers to play it safe, solid, and by the book. IBM builds
on its System...
...that the data structure behind DBMgr may be changed without affecting
the rest of the **code**.
     The Object Management Group, a consortium of more than 300 software
vendors, is defining bindings...

...in a language-neutral fashion. Oracle8, due by year's end, will

support object storage.
        Hitachi **Object**-**Oriented** Cobol
        Although **Hitachi** is an unknown quantity to most software
developers in the United States, it has developed...

...for the second quarter), it does offer an attractive and easy-to- use
windowing environment.
        Hitachi's **Object**-**Oriented** Cobol runs on Windows NT
machines. **Hitachi** also offers **Object**-**oriented** Cobol compilers
for Sun Solaris, Hewlett-Packard HP-UX, and Microsoft Windows 3.1 and...
of innovation, honest capabilities that are easy to understand and use.
        For CICS programmers, the **Code** Assistant removes much of the
tedium of writing parameter lists. A Transaction Assistant accepts
specifications using screen forms and automatically generates the
necessary CICS **code**.
        At the heart of VisualAge for Cobol is SOM, IBM's Common Object
Request Broker...

...a decade. It now finds itself in the unfamiliar position of playing
catch-up to **Hitachi** in supporting **object**-**oriented** extensions.
But **Hitachi**'s lead is not insurmountable. Micro Focus offers a visual
programming environment and more extensive...

...browser also allows programmers to view the hierarchy of the base class
and the source **code**. The Palo Alto, Calif., developer should be
commended for providing the base class source **code**; it is an
excellent laboratory for programmers looking to understand how to program
for reuse...

...investigation.
        Another problem is that the Run-Time System at times simply refuses
to allow **code** with errors to be animated, leaving the programmer
completely in the dark as ...spreadsheet; The benefit is in reducing the
amount of time Cobol programmers spend maintaining legacy **code** and in
reducing the development cycle for new applications.
        Businesses that can develop their own...

9/3/1   (Item 1 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)
(c) 1999 Bell & Howell. All rts. reserv.

00487446 90-13203
Updating Programs with PC Graphics
Gillett, J. E.; **Ohkawa, K.**
Machine Design v62n3 PP: 170-174 Feb 8, 1990
ISSN: 0024-9114 JRNL CODE: MDS

9/3/2   (Item 1 from file: 88)
DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.
(c) 1999 THE GALE GROUP. All rts. reserv.

05200340   SUPPLIER NUMBER: 55884053
**New high-field Nb3Sn conductors prepared from Ta-Sn compound powder.(The
  1998 Applied Superconductivity Conference)**
Tachikawa, K.; Yamamoto, S.; **Yokoyama, T.**; Kato, T
IEEE Transactions on Applied Superconductivity, 9, 2, 2500(5)
June, 1999
ISSN: 1051-8223   LANGUAGE: English   RECORD TYPE: Abstract

9/3/3   (Item 2 from file: 88)
DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.

04995077   SUPPLIER NUMBER: 53527564
**Measurements of the absolut   xternal luminescence quantum efficiency in
ZnSe/ZnMgSSe multiple quantum wells as a function of temperature.**
Westphaling, R.; Ullrich, P.; Hoffmann, J.; Kalt, H.; Klingshirn, C.;
Ohkawa, K.; Hommel, D
Journal of Applied Physics, 84, 12, 6871(6)
Dec 15, 1998
ISSN: 0021-8979   LANGUAGE: English   RECORD TYPE: Abstract

9/3/4   (Item 3 from file: 88)
DIALOG(R)File 88:GALE GROUP BUSINESS A.R.T.S.
(c) 1999 THE GALE GROUP. All rts. reserv.

04690160   SUPPLIER NUMBER: 20439238
**Internal photoluminescence and lifetime of light-emitting diodes on
conductive ZnSe substrates.**
Wenisch, H.; Fehrer, M.; **Ohkawa, K.**; Hommel, D.; Hartmann, H.; Rinas,
U.; Prokesch, M
Journal of Applied Physics, v82, n9, p4690(3)
Nov 1, 1997
ISSN: 0021-8979   LANGUAGE: English   RECORD TYPE: Abstract

9/3/5   (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1999 Bell & Howell. All rts. reserv.

04070281   SUPPLIER NUMBER: 99010340   (USE FORMAT 7 OR 9 FOR FULLTEXT)
**Massive haemorrhage into acoustic neurinoma related to rapid growth of the
tumour**
Ohta, S; **Yokoyama, T**; Nishizawa, S
British Journal of Neurosurgery (BJN), v12 n5, p455-457
Oct 1998
ISSN: 0268-8697   JOURNAL CODE: BJN
DOCUMENT TYPE: Feature
LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1172

9/3/6   (Item 2 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1999 Bell & Howell. All rts. reserv.

04070272   SUPPLIER NUMBER: 99010331   (USE FORMAT 7 OR 9 FOR FULLTEXT)
Regrowth of the residual tumour after acoustic neurinoma surgery
Ohta, S; **Yokoyama, T**; Nishizawa, S; Uemura, K
British Journal of Neurosurgery (BJN), v12 n5, p419-422
Oct 1998
ISSN: 0268-8697   JOURNAL CODE: BJN
DOCUMENT TYPE: Feature
LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 2154

```
show files;ds;t 11/3,k/all;t 13/3,k/all;t 14/3,k/all
File    2:INSPEC 1969-1999/Nov W4
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          (c) 1999 Engineering Info. Inc.
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          (c) 1999 American Mathematical Society
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          (c) 1999 INIST/CNRS
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          (c) 1999 Cambridge Sci Abs
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          (c) 1998 Inst for Sci Info
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          (c) 1999 INST FOR SCI INFO
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          (c) 1999 AIAA
File 233:Microcomputer Abstracts 1981-1999/Dec
          (c) 1999 Information Today Incl.
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          (c) 1999 Contains copyrighted material
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          (c) 1999 American Institute of Physics
File  14:MECHANICAL ENGINEERING ABS 1973-2000/JAN
          (c) 1999 CAMBRIDGE SCI ABS
File  35:Dissertation Abstracts Online 1861-1999/Oct
          (c) 1999 UMI
File 202:Information Science Abs. 1966-1999/Aug
          (c)  Information Today, Inc
File  94:JICST-EPLUS 1985-1999/SEP W3
          (c)1999 JAPAN SCIENCE AND TECH CORP(JST)
File  98:General Sci Abs/Full-Text 1984-1999/Oct
          (c) 1999 The HW Wilson Co.
File  99:Wilson Appl. Sci & Tech Abs 1983-1999/Nov
          (c) 1999 The HW Wilson Co.
File 370:Science 1996-1999/Jul W3
          (c) 1999 AAAS
File 238:Abs. in New Tech & Eng. 1981-1999/Nov
          (c) 1999 Reed-Elsevier (UK) Ltd.
File  65:Inside Conferences 1993-1999/Jun W3
          (c) 1999 BLDSC all rts. reserv.

Set     Items   Description
S1          2   AU="NARISAWA F":AU="NARISAWA FUMIO"
S2          4   AU="NARISAWA, F":AU="NARISAWA, FUMIO"
S3          5   AU="NAYA HIDEMITSU"
S4          6   AU="NAYA H"
S5          2   AU="NAYA, HIDEMITSU"
S6          6   AU="NAYA, H."
S7       2972   AU="YOKOYAMA T"
S8         80   AU="YOKOYAMA TAKANARI":AU="YOKOYAMA TAKANORI"
S9          1   AU="OHKAWA, KEIICHIRO"
S10        26   (S7 OR S8) AND OBJECT(2N)ORIENT?
S11         2   S10 AND CODE?
S12        19   S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S9
S13        12   RD (unique items)
S14        17   HITACHI?(3N)OBJECT()ORIENT?
S15         0   S14 AND CODE?
S16        12   RD S14 (unique items)
>>>KWIC option is not available in file(s): 14, 77
```

11/3,K/1   (Item 1 from file: 34)
DIALOG(R)File 34:SCISEARCH(R) CITED REF SCI
(c) 1999 INST FOR SCI INFO. All rts. reserv.

08067496   Genuine Article#: BN79M   No. References: 6
Title: A **code generator with application-oriented size optimization for**
    ****object**-**oriented** embedded control software**
Author(s): Narisawa F (REPRINT) ; Naya H; **Yokoyama T**
Corporate Source: HITACHI RES LAB,1-1 OMIKA CHO 7 CHOME/HITACHI/IBARAKI
    3191292/JAPAN/ (REPRINT)
, 1998, V1543, P507-510
ISSN: 0302-9743   Publication date: 19980000
Publisher: SPRINGER-VERLAG BERLIN, HEIDELBERGER PLATZ 3, D-14197 BERLIN,
    GERMANYLECTURE NOTES IN COMPUTER SCIENCE
Series: LECTURE NOTES IN COMPUTER SCIENCE
Language: English   Document Type: ARTICLE   (ABSTRACT AVAILABLE)

Title: A **code generator with application-oriented size optimization for**
    ****object**-**oriented** embedded control software**
Author(s): Narisawa F (REPRINT) ; Naya H; **Yokoyama T**
Abstract: We have developed an automatic **code** generator which generates
    C language **code** from **object**-**oriented** specification
    diagrams. It reduces the target program size 35% smaller than the size
    of the program which was simply translated into C++ **code**. We
    accomplished this effective optimization by removing some mechanisms of
    object-**oriented** programming languages which are unused for our
    target application, embedded real-time software. **Object**-
    oriented programming languages provide many useful features such as
    inheritances, constructors, destructors, virtual tables and instances
    ...

...and the runtime behavior of the software is fixed. We remove the unused
    mechanisms of **object**-**orientation** by considering the feature of
    the target application to reduce the size of the programs.

 11/3,K/2   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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03907702   JICST ACCESSION NUMBER: 99A0202015   FILE SEGMENT: JICST-E
An **Object-**Oriented** Development Method for Embedded Control Systems.**
YOKOYAMA TAKANORI (1)
(1) Hitachi, Ltd., Hitachi Res. Lab.
Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report
    (Institute of Electronics, Information and Communication Enginners),
    1998, VOL.98,NO.440(SS98 35-38), PAGE.25-32, FIG.12, REF.12
JOURNAL NUMBER: S0532BBG
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

An **Object-**Oriented** Development Method for Embedded Control Systems.**
YOKOYAMA TAKANORI (1)
ABSTRACT: The paper describes an **object**-**oriented** development method
    for embedded control systems. We present an **object**-**oriented**
    model based on a time-triggered architecture which consists of
    control-data objects calculating values...
...distributed control systems based on the time-triggered architecture.
    Our development tool generates programs whose **code**-sizes are
    optimized by removing unused **object**-**oriented** mechanisms. We

· show an automotive distributed system as an example application.
(author abst.)
DESCRIPTORS: **object**-**oriented** design...
>>>KWIC option is not available in file(s): 14, 77

13/3,K/1   (Item 1 from fil : 2)
DIALOG(R)File   2:INSPEC
(c) 1999 Institution of Electrical Engineers. All rts. reserv.

6390836   INSPEC Abstract Number: C1999-12-7420-015
  Title: A code generator with application-oriented size optimization for object-oriented embedded control software
  Author(s): **Narisawa, F.**; **Naya, H.**; Yokoyama, T.
  Author Affiliation: Res. Lab., Hitachi Ltd., Ibaraki, Japan
  Conference Title: Object-Oriented Technology. ECOOP'98 Workshop Reader.
ECOOP'98 Workshops, Demos, and Posters. Proceedings   p.507-10
  Editor(s): Demeyer, S.; Bosch, J.
  Publisher: Springer-Verlag, Berlin, Germany
  Publication Date: 1998 Country of Publication: Germany   xxii+573 pp.
  ISBN: 3 540 65460 7   Material Identity Number: XX-1999-01939
  Conference Title: Object-Oriented Technology. ECOOP'98 Workshop Reader
  Conference   Date: 20-24 July 1998   Conference Location: Brussels,
Belgium
  Language: English
  Copyright 1999, IEE

  Author(s): **Narisawa, F.**; **Naya, H.**; Yokoyama, T.

13/3,K/2   (Item 2 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 1999 Institution of Electrical Engineers. All rts. reserv.

5960065   INSPEC Abstract Number: C9808-6110J-034
  Title: Object-oriented development based on polymorphism patterns and optimization to reduce executable code size
  Author(s):   **Naya,   H.**;   **Narisawa,   F.**;   Yokoyama, T.; Ohkawa, K.;
Amano, M.
  Author Affiliation: Res. Lab., Hitachi Ltd., Ibaraki, Japan
  Conference   Title: Proceedings.   Technology of Object-Oriented Languages
and Systems, TOOLS 25 (Cat. No.97TB100239)   p.68-78
  Editor(s): Mingins, C.; Duke, R.; Meyer, B.
  Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA
  Publication Date: 1998 Country of Publication: USA   ix+372 pp.
  ISBN: 0 8186 8485 2   Material Identity Number: XX98-01479
  U.S. Copyright Clearance Center Code: 0 8186 8485.2/98/$10.00
  Conference Title: Proceedings Technology of Object-Oriented Languages and
Systems TOOLS 25
  Conference Sponsor: Interactive Software Eng
  Conference Date: 24-28 Nov. 1997   Conference Location: Melbourne, Vic.,
Australia
  Language: English
  Copyright 1998, IEE
  Author(s):   **Naya,   H.**;   **Narisawa,   F.**;   Yokoyama, T.; Ohkawa, K.;
Amano, M.

13/3,K/3   (Item 3 from file: 2)
DIALOG(R)File   2:INSPEC
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5222422   INSPEC Abstract Number: A9609-8130F-005
  Title: Microstructure and mechanical properties of rapidly solidified

Al-Mn-Cr-Si alloy foils
   Author(s): Takeshita, K.; **Naya, H.**
   Author Affiliation: Dept. of Mech. Eng., Fukui Univ., Japan
   Journal: Journal of the Japan Institute of Metals   vol.60, no.2   p. 163-8
   Publisher: Japan Inst. Metals,
   Publication Date: Feb. 1996 Country of Publication: Japan
   CODEN: NIKGAV ISSN: 0021-4876
   SICI: 0021-4876(199602)60:2L.163:MMPR;1-I
   Material Identity Number: J173-96003
   Language: Japanese
   Copyright 1996, IEE

   Author(s): Takeshita, K.; **Naya, H.**

 13/3,K/4   (Item 4 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 1999 Institution of Electrical Engineers. All rts. reserv.

03871449   INSPEC Abstract Number: B91034994
 Title: A new transducer for thermography to observe the electric field distributions in a microwave oven
   Author(s): Kashiwa, T.; **Naya, H.**; Fukai, I.
   Author Affiliation: Dept. of Electr. Eng., Hokkaido Univ., Sapporo, Japan
   Journal: Microwave and Optical Technology Letters   vol.4, no.2   p. 81-3
   Publication Date: 20 Jan. 1991 Country of Publication: USA
   CODEN: MOTLEO ISSN: 0895-2477
   U.S. Copyright Clearance Center Code: 0895-2477/91/$4.00
   Language: English

   Author(s): Kashiwa, T.; **Naya, H.**; Fukai, I.

 13/3,K/5   (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 1999 INIST/CNRS. All rts. reserv.

  09331047   PASCAL No.: 91-0121420
 (Ages par thermoluminescence des depots de coulees pyroclastiques d'Hakkoda, Prefecture Aomori, nord-est du Japon)
 (TL ages of the Hakkoda pyroclastic flow deposits, Aomori Prefecture, Northeast Japan)
   TAKASHIMA I; HONDA S; **NAYA H**
   Journal: Journal of mineralogy, petrology and economic geology, 1990, 85 (10) 459-468
   Language: Japanese   Summary Language: English

   TAKASHIMA I; HONDA S; **NAYA H**

 13/3,K/6   (Item 1 from file: 103)
DIALOG(R)File 103:Energy SciTec
(c) 1999 Contains copyrighted material. All rts. reserv.

04073061   NEDO-96-912866; EDB-96-156821
 Title: Microstructure and m chanical properties of rapidly solidified Al-Mn-Cr-Si alloy foils
Original Title: Kyurei gyokoshita Al-Mn-Cr-Si gokin hakutai no soshiki to kikaiteki seishitsu
Author(s): Takesita, K. (Fukui Univ. (Japan). Faculty of Engineering); **Naya, H. **(Nisshin Steel Co. Ltd., Tokyo (Japan))

Source: Nippon Kinzoku Gakkaishi (Journal of the Japan Institute of
     Metals) v 60:2. Coden: NIKGAV ISSN: 0021-4876
Publication Date: 20 Feb 1996   p 163-168
Language: Japanese

...Author(s): **Naya, H. **(Nisshin Steel Co. Ltd., Tokyo (Japan))

13/3,K/7   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

02334956   JICST ACCESSION NUMBER: 95A0131992 FILE SEGMENT: JICST-E
**Quick and easy monitoring control of loop SW.Loop SW remote monotor and
    control tool (LSCN) developed.**
NARISAWA FUMIO (1)
(1) Nippon Telegr. and Teleph. Corp.
NTT Gijutsu Janaru, 1995, VOL.7,NO.1, PAGE.90-91, FIG.4
JOURNAL NUMBER: F0050BAZ   ISSN NO: 0915-2318
UNIVERSAL DECIMAL CLASSIFICATION: 621.391.1
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication

NARISAWA FUMIO (1)

 13/3,K/8   (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

01571087   JICST ACCESSION NUMBER: 92A0281388 FILE SEGMENT: JICST-E
**A study of an inference control system in a domain shell for electric power
    with a large-scale system model.**
FUKUI CHIHIRO (1); WATANABE TEI (1); **NAYA HIDEMITSU** (1)
(1) Hitachi, Ltd., Hitachi Res. Lab.
Denki Gakkai Zenkoku Taikai Koen Ronbunshu, 1992, VOL.1992,NO.9, PAGE.9.265
, FIG.1, REF.1
JOURNAL NUMBER: S0653AAG
UNIVERSAL DECIMAL CLASSIFICATION: 621.311.1
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
MEDIA TYPE: Printed Publication

FUKUI CHIHIRO (1); WATANABE TEI (1); **NAYA HIDEMITSU** (1)

 13/3,K/9   (Item 3 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
(c)1999 JAPAN SCIENCE AND TECH CORP(JST). All rts. reserv.

00924308   JICST ACCESSION NUMBER: 90A0128213 FILE SEGMENT: JICST-E
Analysis of pulse response in NRD guide by spatial network method.
TERASHIMA KOJI (1); **NAYA HIDEMITSU** (1); YOSHIDA NORINOBU (1); FUKAI
    ICHIRO (1)
(1) Hokkaido Univ., Faculty of Engineering
Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National
    Convention Record, the Institute of Electronics, Information and
    Communication Engineers), 1989, VOL.1989,NO.Spring Pt.2, PAGE.2.540,
    FIG.4, REF.3
JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 621.372.2
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
MEDIA TYPE: Printed Publication

TERASHIMA KOJI (1); **NAYA HIDEMITSU** (1); YOSHIDA NORINOBU (1); FUKAI
    ICHIRO (1)

13/3,K/10   (Item 4 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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00732188   JICST ACCESSION NUMBER: 89A0421720 FILE SEGMENT: JICST-E
**Three-dimensional transient analysis of cavity with iris by spatial network
    method.**
NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIROU (1)
(1) Hokkaido Univ., Faculty of Engineering
Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National
    Convention Record, the Institute of Electronics, Information and
    Communication Engineers), 1989, VOL.1989,NO.Spring Pt.2, PAGE.592,
    FIG.4, REF.4
JOURNAL NUMBER: G0508ADY
UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
MEDIA TYPE: Printed Publication

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIROU (1)

13/3,K/11   (Item 5 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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00729819   JICST ACCESSION NUMBER: 89A0413402 FILE SEGMENT: JICST-E
**Transient analysis of cavity resonance characteristic on spatial network
    method.**
NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)
(1) Hokkaido Univ., Faculty of Engineering
Denki Gakkai Denjikai Riron Kenkyukai Shiryo, 1989, VOL.EMT-89,NO.32-44,
    PAGE.15-22, FIG.4, TBL.1, REF.7
JOURNAL NUMBER: Z0909AAV
UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)

13/3,K/12   (Item 6 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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00711283   JICST ACCESSION NUMBER: 88A0599464 FILE SEGMENT: JICST-E
**Three-dimensional analysis of system involving the cavity by spatial
    network method.**
NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)
(1) Hokkaido Univ., Faculty of Engineering

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Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report
    (Institute of Electronics, Information and Communication Enginners),
    1988, VOL.88,NO.80, PAGE.23-28(A.P88-28), FIG.9, TBL.1, REF.7
JOURNAL NUMBER: S0532BBG
UNIVERSAL DECIMAL CLASSIFICATION: 621.372.4
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

NAYA HIDEMITSU (1); YOSHIDA NORINOBU (1); FUKAI ICHIRO (1)
>>>KWIC option is not available in file(s): 14, 77

 14/3,K/1   (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
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5421048   INSPEC Abstract Number: C9612-6160J-020
 Title: Hitachi Object Database
  Author(s): Wakayama, S.; Fukuda, T.; Mori, Y.
  Journal: Hitachi Review   vol.45, no.3   p.151-4
  Publisher: Hitachi,
  Publication Date: June 1996 Country of Publication: Japan
  CODEN: HITAAQ ISSN: 0018-277X
  SICI: 0018-277X(199606)45:3L.151:HOD;1-U
  Material Identity Number: H006-96005
  Language: English
  Copyright 1996, IEE

   ...Abstract: system (RDBMS). It permanently stores objects that are
generated in an application program created using **object** **oriented**
 programming. The **Hitachi** Object Database (Hitachi ODB) offers high
performance and advanced reliability features that are based on...

 14/3,K/2   (Item 2 from file: 2)
DIALOG(R)File   2:INSPEC
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5421047   INSPEC Abstract Number: C9612-7190-064
 **Title: Application of object-oriented techniques to the development of a
transportation management system**
  Author(s): Yano, J.; Yamamoto, K.; Kajii, K.; Kasama, S.
  Journal: Hitachi Review   vol.45, no.3   p.139-44
  Publisher: Hitachi,
  Publication Date: June 1996 Country of Publication: Japan
  CODEN: HITAAQ ISSN: 0018-277X
  SICI: 0018-277X(199606)45:3L.139:AOOT;1-N
  Material Identity Number: H006-96005
  Language: English
  Copyright 1996, IEE

   ...Abstract: certain inherent characteristics of expert systems,
improvements tend to take a long time to implement. **Hitachi** has applied
object-**oriented** techniques to the development of a crew diagram
expert system for Nishi-Nippon Railroad Co...

... now, this has been a difficult task because the process has not been
well defined. **Hitachi** selected an **object**-**oriented** approach
because it provides a step-by-step completion process, and makes it easy to
...

14/3,K/3   (Item 3 from file: 2)
DIALOG(R)File   2:INSPEC
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5421046   INSPEC Abstract Number: C9612-7100-047
 Titl :   Object-oriented business   process analysis and development using groupware
   Author(s): Eguchi, Y.; Matsushima, T.; Okamura, A.; Kido, A.
   Journal: Hitachi Review   vol.45, no.3   p.131-8
   Publisher: Hitachi,
   Publication Date: June 1996 Country of Publication: Japan
   CODEN: HITAAQ ISSN: 0018-277X
   SICI: 0018-277X(199606)45:3L.131:OOBP;1-B
   Material Identity Number: H006-96005
   Language: English
   Copyright 1996, IEE

   Abstract: **Hitachi** has applied **object**-**oriented** and groupware technologies to the development of a purchasing system aimed at small- and medium...

14/3,K/4   (Item 4 from file: 2)
DIALOG(R)File   2:INSPEC
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5421044   INSPEC Abstract Number: C9612-6110J-037
   Title: **Hitachi's   **object**-**oriented**   system   development methodology**
   Author(s): Hagi, Y.; Sonehara, M.; Chiba, H.
   Journal: Hitachi Review   vol.45, no.3   p.119-24
   Publisher: Hitachi,
   Publication Date: June 1996 Country of Publication: Japan
   CODEN: HITAAQ ISSN: 0018-277X
   SICI: 0018-277X(199606)45:3L.119:HOOS;1-5
   Material Identity Number: H006-96005
   Language: English
   Copyright 1996, IEE

   Title: **Hitachi's   **object**-**oriented**   system   development methodology**
   ...Abstract: itself to all phases of the development cycle. In response, Hitachi has developed its own **object** **oriented** methodology, the **Hitachi** Standard Procedure for **Object** **Oriented** Development. This methodology has been refined through a process of testing and evaluating certain hypotheses and making improvements based on the findings. The result is the publication of the **Hitachi** Standard Procedure for **Object** **Oriented** Development.
   ...Identifiers: **Hitachi** Standard Procedure for **Object** *Oriented** Development

14/3,K/5   (Item 5 from file: 2)
DIALOG(R)File   2:INSPEC
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5421041   INSPEC Abstract Number: C9612-6110J-036
 Title: **Hitachi's **object**-**oriented** software systems**
   Author(s): Maezawa, H.; Hirose, T.
   Journal: Hitachi Review   vol.45, no.3   p.101-6
   Publisher: Hitachi,
   Publication Date: June 1996 Country of Publication: Japan
   CODEN: HITAAQ ISSN: 0018-277X

Karen Lehman EIC 3600 306-5783 14:00 January 3, 2000

SICI: 0018-277X(199606)45:3L.101:HOOS;1-U
Material Identity Number: H006-96005
Language: English
Copyright 1996, IEE

Title: **Hitachi**'s **object**-**oriented** software systems
  Identifiers: **Hitachi** **object** **oriented** software systems...

14/3,K/6   (Item 1 from file: 6)
DIALOG(R)File   6:NTIS
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1990866 NTIS Accession Number: PB97-129084
  Hitachi Review, Vol. 45, No. 3, June 1996. **Hitachi **Object**-
Oriented Software Products**
  (Bimonthly rept)
  Sayama, Y.
  Hitachi Ltd., Tokyo (Japan).
  Corp. Source Codes: 012206000
  cJun 96   66p
  Languages: English
  Journal Announcement: GRAI9707
  See also PB97-129092 and PB96-212774.
  Order   this   product   from   NTIS   by: phone   at   1-800-553-NTIS   (U.S.
customers);   (703)605-6000   (other   countries);   fax   at   (703)321-8547;   and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC E08/MF E08

  Hitachi Review, Vol. 45, No. 3, June 1996. **Hitachi **Object**-
Oriented Software Products**
  Contents: **Hitachi**'s **Object**-**Oriented** Software System; Global
Client/Server Architecture of the 21st Century; Componentware for Network
Computing in the 21st Century; **Hitachi**'s **Object**-**Oriented** System
Development Methodology; Object-Oriented Enterprise Information System
Development Using Groupware; Object-Oriented Business Process...

14/3,K/7   (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 1999 INIST/CNRS. All rts. reserv.

  12785295   PASCAL No.: 96-0504685
  Hitachi's **object**-**oriented** software systems
  MAEZAWA H; HIROSE T
  Systems Development Laboratory, Hitachi, Ltd., Japan; Information Systems
Group Strategic Business Development Division, Hitachi, Ltd., Japan
  Journal: Hitachi review, 1996, 45 (3) 101-106
  Language: English

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  Hitachi's **object**-**oriented** software systems

14/3,K/8   (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
(c) 1999 INIST/CNRS. All rts. reserv.

  12785201   PASCAL No.: 96-0504587
  **Application of object-oriented techniqu s to the development of a
transportation management system**

YANO J'I; YAMAMOTO K; KAJII K; KASAMA S
Information Systems Division, Hitachi, Ltd., Japan; Hitachi System
Engineering, Ltd., Japan
Journal: Hitachi review, 1996, 45 (3) 139-144
Language: English

... of certain inherent characteristics ofexpert systems, improvements
tend to take a long time to implement. **Hitachi** has recently applied
object-**oriented** techniques to the development ofa crew diagram
expert system for Nishi-Nippon Railroad Co., Ltd...

... now, this has been a difficult task because the process has not been
well defined. **Hitachi** selected an **object**-**oriented** approach
because it provides a step-by-step completion process, and makes it easy to
...

14/3,K/9   (Item 3 from file: 144)
DIALOG(R)File 144:Pascal
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12785198   PASCAL No.: 96-0504584
Hitachi's **object**-**oriented** system development methodology
HAGI Y; SONEHARA M; CHIBA H
Institute of Advanced Business Systems, Hitachi, Ltd., Japan; Information
Systems Division, Hitachi, Ltd., Japan
Journal: Hitachi review, 1996, 45 (3) 119-124
Language: English

Hitachi's **object**-**oriented** system development methodology
... itself to all phases of the development cycle. In response, Hitachi
has developed its own **object**-**oriented** methodology, the **Hitachi**
Standard Procedure for **Object**-**Oriented** Development. This
methodology has been refined through a process of testing and evaluating
certain hypotheses and making improvements based on the findings. The
result is the publication of the **Hitachi** Standard Procedure for
Object-**Oriented** Development.

14/3,K/10   (Item 4 from file: 144)
DIALOG(R)File 144:Pascal
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12785045   PASCAL No.: 96-0504422
Object-oriented business process analysis and development using groupware
EGUCHI Y; MATSUSHIMA T; OKAMURA A; KIDO A
Hitachi Software Engineering Co., Ltd., Japan; Corporate Information
Systems Office, Hitachi, Ltd., Japan; Information Systems Division,
Hitachi, Ltd., Japan
Journal: Hitachi review, 1996, 45 (3) 131-138
Language: English

Hitachi has applied **object**-**oriented** and groupware
technologies to the development of a purchasing system aimed at small- and
medium...

14/3,K/11   (Item 5 from file: 144)
DIALOG(R)File 144:Pascal
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  12785040   PASCAL No.: 96-0504417
Hitachi object database
  WAKAYAMA S; FUKUDA T; MORI Y
  Software Development Center, Hitachi, Ltd., Japan
  Journal: Hitachi review, 1996, 45 (3) 151-154
  Language: English

  ...system (RDBMS). It permanently stores objects that are generated in an
application program created using **object**-**oriented** programming. The
Hitachi Object Database (Hitachi ODB) offers high performance and
advanced reliability features that are based on...

14/3,K/12   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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02745327   JICST ACCESSION NUMBER: 96A0110012 FILE SEGMENT: JICST-E
Object-Oriented Computer-Aided Software Engineering.
TAKADACHI MASATO (1); TOMONAGA KAZUKO (2)
(1) Hitachi, Ltd., System Dev. Lab.; (2) Hitachi, Ltd.
Hitachi Hyoron, 1995, VOL.77,NO.12, PAGE.847-850, FIG.5, REF.3
JOURNAL NUMBER: F0062AAN   ISSN NO: 0367-5874   CODEN: HITAA
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

ABSTRACT: System analysisvdesign support tool "SEWB3/OOAD" based on the
     HITACHI **object** **orientation** development standard procedure
     is now on the market. The developed tool is composed a design...

14/3,K/13   (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPLUS
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02745326   JICST ACCESSION NUMBER: 96A0110011 FILE SEGMENT: JICST-E
New Methodology for System Development Using Object-Oriented Technology.
CHIBA HIROYUKI (1); HAGI YOICHI (1); TAKADACHI MASATO (2); HATSUDA KENJI
     (2); TAKEDA SHIGERU (2)
(1) Hitachi., Ltd.; (2) Hitachi, Ltd.
Hitachi Hyoron, 1995, VOL.77,NO.12, PAGE.839-842, FIG.6, REF.4
JOURNAL NUMBER: F0062AAN   ISSN NO: 0367-5874   CODEN: HITAA
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02.001
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

ABSTRACT: The **Hitachi** **object** **orientation** development standard
     procedure" was developed describe know-hoe easily based on past
     exeprience in analysis...

14/3,K/14   (Item 3 from file: 94)

02126682   JICST ACCESSION NUMBER: 95A0400922   FILE SEGMENT: PreJICST-E
Object managem nt facility in **Hitachi **Object**-**Oriented** Database
    System.**
TOKUNAGA MIKIHIKO (1); WAKAYAMA SATOSHI (1); MUNECHIKA HIDEO (2)
(1) Hitachi, Ltd.; (2) H   SE J H ED . CE., L .
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
    PAGE.4.77-4.78
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

Object management facility in **Hitachi **Object**-**Oriented** Database
    System.**

14/3,K/15   (Item 4 from file: 94)

02126681   JICST ACCESSION NUMBER: 95A0400921   FILE SEGMENT: PreJICST-E
Extended Relationship of **Hitachi **Object**-**Oriented** Database
    System.**
ASAMI MASATO (1); YAMAMOTO YOICHI (1); KOBAYASHI SUSUMU (1); OKANO KAZUHIRO
    (2); FUJII KIYOSHI (3)
(1) Hitachi, Ltd., System Dev. Lab.; (2) H   S   SE J H , L .; (3)
    H   EA E EJ
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
    PAGE.4.73-4.74
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

Extended Relationship of **Hitachi **Object**-**Oriented** Database
    System.**

14/3,K/16   (Item 5 from file: 94)

02126680   JICST ACCESSION NUMBER: 95A0400920   FILE SEGMENT: PreJICST-E
An Introduction to **Hitachi** **Object**-**Oriented** Database System.
YAMAMOTO YOICHI (1); WAKAYAMA SATOSHI (1); TOKUNAGA MIKIHIKO (1); MARUYAMA
    TAKEO (1); MUNECHIKA HIDEO (2)
(1) Hitachi, Ltd.; (2) H   SE J H ED . CE., L .
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
    PAGE.4.71-4.72
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

An Introduction to **Hitachi** **Object**-**Oriented** Database System.

14/3,K/17   (Item 6 from file: 94)

02125688   JICST ACCESSION NUMBER: 95A0385842   FILE SEGMENT: PreJICST-E
Query facility in **Hitachi** **Object**-**Oriented** Dabase System.
NAMIOKA MIYOKO (1); KIYASU KIYOTAKA (1); YAMAMOTO YOICHI (1); IBE IKUYO
    (1); TANAKA HITOSHI (1)
(1) Hitachi, Ltd.
Joho Shori Gakkai Zenkoku Taikai Koen Ronbunshu, 1995, VOL.50th,NO.4,
    PAGE.4.75-4.76
JOURNAL NUMBER: S0731ACN
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

Query facility in **Hitachi** **Object**-**Oriented** Dabase System.
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